DOCUMENT RESUME

ED 074 681 EC 051 730

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TITLE	Impact 6 of the Title VI Programs in the State of Oregon September, 1971-August, 1972.
INSTITUTION	Oregon State System of Higher Education, Monmouth. Teaching Research Div.
SPONS AGENCY	Oregon State Board of Education, Salem.
PUB DATE	72
NOTE	144p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	Elementary School Students; *Exceptional Child Education; Federal Aid; *Handicapped Children; Preschool Children; *Program Descriptions; *Program Evaluation; Secondary School Students
IDENTIFIERS	Elementary Secondary Education Act Title VI; *Oregon

ABSTRACT

Described and evaluated were 18 Oregon projects for handicapped children at the preschool, elementary, and secondary school levels funded under Title VI of the Elementary and Secondary Education Act of 1965. Handicapping conditions and the number of children served were as follows: emotionally disturbed (199), learning disabled (185), trainable mentally retarded (27), physically handicapped (144), deaf (33), educable mentally retarded (18), multiple handicapped (45), and speech handicapped (111). The third party evaluation team made the following general conclusions: the use of behavior modification techniques with emotionally disturbed children continues to be most effective for children with behavior problems; Distar is an effective tool in the remediation of learning disabilities; there is increasing evidence of the value of preschool education for handicapped children; and the evaluation technique contributes to the quality of both Title VI projects and special education within the state. Projects are generally described in terms of project title, location, type and number of children served, funding allocated, project beginning date, project ending date, background and rationale, objectives and evaluation plan, methodology, results, and third party evaluator's comments. (DB)

ED 074681

Impact 6

of the Title VI Programs in the State of Oregon

September 1971 – August 1972

Prepared for
The Oregon Board of Education
By
The Teaching Research Division of the
Oregon State System of Higher Education

H. D. Bud Fredericks
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EC 051 730E

TEACHING RESEARCH
a Division of the Oregon State System of Higher Education

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This report was prepared under the auspices
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This publication was financed by funds from Title VI, ESEA as amended October, 1968.

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This publication was financed by funds
from Title VI, ESEA, as amended
October, 1968

The Impact in the State of Oregon of Title VI of the Elementary and Secondary Education Act of 1965 as Amended

September, 1971 – August, 1972

Introduction:

Title VI of the Elementary and Secondary Education Act of 1965, P.L. 89-750, as amended, authorizes that U.S. Commissioner of Education make grants for the purpose of assisting states in the initiation, expansion and improvement of programs and projects for the education of handicapped children at the preschool, elementary and secondary school levels. The term "handicapped children" includes the mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health impaired children who because of their handicaps require special education and related services.

Foundation of the Title VI program within any state is the State Plan, the contract or agreement between the state and the U.S. Office of Education, for the operation of programs and projects for handicapped children at the preschool, elementary and secondary school levels. The plan submitted by the State of Oregon was approved by the State Board of Education on April 10, 1968 with an effective date of April 18, 1968. This plan was approved by the United States Office of Education on May 5, 1968.

The State Plan described the present statewide educational program for handicapped children. This description is excerpted and included as Annex A of the publication, **Impact of the Title VI Programs in the State of Oregon**. The State Plan described the procedures for the administration of Title VI within the state.

In order to determine which projects were funded under the Title VI program, the Oregon Board of Education, with the assistance of the Advisory Committee, defined and selected the following criteria for establishing priorities for funding projects and programs:

1) The extent to which the project will provide special education services to categories of handicapped children who are not being served or served adequately through the state reimbursed handicapped child program.

2) Adequacy of description and documentation of the need for the special education service desired in the project.

   Highest priority to projects that stress unmet needs by documenting the number of handicapped children needing the special educational service proposed.

3) Extent to which the project stresses early identification of handicapped children and includes aspects of early treatment.

   Highest priority to projects that provide preschool special education services to handicapped children.

4) Adequacy of the project procedures for identifying the handicapped children to be served.

   Highest priority to projects that provide adequate diagnostic provisions for selecting children in need of the special education service.

5) Extent to which the project is of sufficient size, scope and quality to give reasonable assurance of meeting the educational needs of the handicapped children to be served.

   Highest priority to projects that provide special educational services focused on manageable numbers of handicapped children qualifying for the service and to projects that are designed to provide comprehensive service to these children.

6) Evidence of supplementation of the regular school program by the proposed project or program.

Highest priority to projects that make specific and realistic plans for integration into the regular school program of the handicapped children served by the project.

7) Extent to which other community and state resources are represented in the planning and operation of the project or program.

Highest priority to those projects that make full use of other community and state resources that are able to assist in the planning and operation of the project.

8) Provisions for evaluating the effectiveness of the special education services to be provided in the project.

Highest priority to projects that include specific evaluation procedures that are consistent with the objectives of the project appropriate for the services provided.

9) Provisions for participation of qualified, nonpublic school handicapped children in the project.

Highest priority to projects that make provision for participation of eligible handicapped children enrolled in private schools in the area to be served by the project.

10) Adequacy of the size and qualification of the staff.

Highest priority to the projects employing or purchasing the services of well qualified staff and with a high enough ratio of project staff to the number of handicapped children to be served by the project to ensure effective service.

11) Adequacy of the facilities, both existing and proposed, for conduct of the project or program.

Highest priority to school facilities that are already available to the district and considered appropriate for the needs of the project.

12) Economic efficiency of the proposed project.

Highest priority to those projects listing a detailed budget of estimated amounts of funds required for operation of the project and for cost-service ratios that are consistent with the special education services to be provided.

The policies and procedures under which Oregon initiated, approved, and conducted state programs and projects and local programs and projects were described completely in **Impact of the Title VI Programs in the State of Oregon**. Essentially, this procedure involved school districts submitting applications for Title VI monies. These applications were reviewed by the Advisory Committee who determined recommendations for funding of applications. These recommendations were approved by the Oregon Board of Education who then notified the applying districts.

Evaluation Plan:

From the inception of the Title VI program within the state it was determined that Oregon should have, as part of its Title VI operation, a Third Party Evaluation. Consequently, the State Department of Education contracted with Teaching Research, a Division of the Oregon State System of Higher Education, for consulting services for the development of an evaluation program for Title VI in Oregon. The report of the evaluation of the summer, 1968 program is contained in **Impact of the Title VI Programs in the State of Oregon.** This evaluation model was considered so acceptable by not only the Oregon Board of Education but also by the United States Office of Education that it was continued for subsequent funding periods. The evaluation of Title VI programs for the school year 1968 to June 1969 was also conducted by Teaching Research, a Division of the Oregon State System of Higher Education. The report of that evaluation is contained in **Impact 2 of the Title VI Programs in the State of Oregon.** The summer programs for 1969 were evaluated by the Special Education Department of the University of Oregon. The report of the evaluation is contained in **Impact 3 of the Title VI Programs in the State of Oregon**. Projects for 1969 and 1970 were again evaluated by Teaching Research. **Impact 4 of the Title VI Programs in the State of Oregon,** September 1969–August 1970, contains the report of that evaluation. Teaching Research, evaluating the projects for the period September 1970 to August 1971, reported those results in **Impact 5 of the Title VI Programs in the State of Oregon**, September 1970-August 1971.

After the projects had been selected for funding by the Advisory Committee, research consultants from the Teaching Research Division and the Coordinator of Title VI programs within the state met with each of the project directors prior to the commencement of the project. The purpose of this meeting was to finalize an evaluation plan for the particular project. This final evaluation plan entailed the determination of which measurement instruments were to be used and the method of conducting the measurements with these instruments.

During the school year Teaching Research consultants visited each project twice to insure that the evaluation procedures were being provided for as planned. Special Education consultants of the State Department of Education visited projects associated with their specialty, not only serving as advisors to project directors in the conduct of the project, but also concerning themselves with the progress of the evaluation. Finally, the Title VI Coordinator visited each of the projects as a further check to insure that their progress and evaluation procedures were proceeding in accordance with plan.

After the final report of each project was prepared and submitted by the project director, the results were examined, treated statistically where necessary, and determination made as to how successfully the project achieved its stated purposes. The results of that determination are reported herein.

The cost to the state for this Third Party Evaluation by the Teaching Research Division was $12,545, which included not only the initial planning with project directors and visits to project sights, but also the drafting of this report, including computer usage for statistical computations.

Summary
of
Needs and Concerns for Special Education in Oregon

As part of the administrative funds of Title VI monies, a study was conducted by Teaching Research to pinpoint the most critical needs for special education in each handicapping condition. The results of this study were reported in December, 1971 in a separate monograph entitled, **Needs and Concerns for Special Education in Oregon**. A summary of that monograph follows:

Background

A need assessment study of handicapped children within the State of Oregon was undertaken to provide the Oregon State Department of Education with information concerning the most pressing educational needs within the various handicapped groups as defined by Oregon law. At the present time the State of Oregon focuses its energies and monies on several types of handicapped children and supports a large number of projects within each of the handicapped areas. State Department support for various programs ranges from providing rresources to programs that are presently nonexistent to supporting on-going programs that have been in existence for some time. There is no focus on a particular problem within any of the handicapping conditions, nor is there a focus on any one handicap. This state of affairs exists because the Oregon Board of Education has no systematic way of determining what the priorities should be within the education of the handicapped and on what priorities they should focus their energies.

This study proposed to examine each of the handicapping conditions as defined by the Oregon Board of Education and attempt to pinpoint most critical needs for each area. These data would then lend themselves to the development of a set of priorities for each handicapping condition, which would allow the state to make a systematic effort in those areas and hopefully, by doing so, increase the impact of special education within the State of Oregon.

Methodology

Oregon law specifies certain children to be eligible for special education. Each of the eligible types of children were included in the present study. The handicapping conditions which were examined, therefore, consisted of the following: educable mentally retarded, trainable mentally retarded, deaf, hard of hearing, speech impaired, visually handicapped, emotionally disturbed, extreme learning problem, physically handicapped, and multiple handicapped. Because unwed mothers and the gifted are included in Oregon law as children with special education needs, they were also included in the study. Trainable mentally retarded were included evenn though the Mental Health Division is responsible for their educational program.

It was determined that the major vehicle by which information about needs would be collected would be a structured questionnaire. It was also believed that the most effective way of administering this questionnaire would be in an oral face-to-face visit with the person identified as having relevant information concerning a particular handicapping condition.

The respondents to this questionnaire were to be a selected group of opinion leaders throughout the State of Oregon. These opinion leaders were to be selected from superintendents of schools, principals, directors of special education, professors of higher education, teachers in all of the handicapping areas, parents of handicapped children, clinic directors, superintendents of institutions, and representatives from special interest groups.

To determine both the questions to be asked and to identify the opinion leaders throughout the state, the following procedure was adopted.

1. A series of tentative questions within each handicapping area was formulated by the various consultants at the Oregon Board of Education and the Teaching Research staff. These were combined into a tentative questionnaire.

2. An Advisory Board, termed the Oregon Needs Study Board, was formulated and consisted of the following people: Mr. Wallace Bruce, Director, Tucker-Maxon Oral School, Portland; Dr. James Carlson, Administrative Assistant, Parkrose School District, Portland; Mrs. Barbara Cox, Director of Special Education, Lake Oswego Public Schools; Mr. Carl Haugerud, Deputy Administrator, Vocational Rehabilitation Center, Salem; Dr. Mary Howden, Director of Special Education, Harney County I.E.D., Burns; Dr. Robert Mattson, Associate Dean, University of Oregon, Eugene; Dr. Victor Menashe, Associate Director, Crippled Children's Division, University of Oregon Medical School, Portland; Mr. Fred Rugh, Consultant, Special Education, Salem School District; Mr. Ken Stanhope, Superintendent, Umatilla I.E.D., Pendleton; and Mr. Edgar A. Taylor, Director, Special Education, Portland School District.

These people were selected as members of the Oregon Needs Study Board because they were knowledgeable about the area of special education and represented virtually every type of agency or group concerned with educating the handicapped. The tentative draft of questions was presented to this Board, who made recommended changes and additions to be incorporated into the final questionnaire.

3. The final questionnaire was established and presented to a firm of professional pollsters (Bardsley and Haslacher) who had been chosen to conduct the face-to-face interview with the selected population of respondents.

4. The firm of Bardsley and Haslacher then presented the questionnaire to a sample group of the respondents and recommended certain changes which would make the questionnaire more suitable for this type of structured interview.

5. All questions on the questionnaire were not administered to all respondents. Certain questions were suitable for superintendents whereas other questions were suitable for teachers and parents. Of course certain questions were suitable for all categories of respondents.

It was found that superintendents and directors of special education had a much larger number of questions to answer than most other respondents and, consequently, their questions were divided into two parts.

The survey and questionnaire were administered during the summer and fall of 1970. The following numbers of respondents were interviewed:

Superintendents of School Districts	44
Principals of Schools	8
Directors or Supervisors of Special Education Programs	50
Professors of Higher Education	13
Teachers:	
Educable Mentally Retarded	33
Extreme Learning Problem	26
Emotionally Disturbed	5
Speech	26
Deaf	8
Visually Handicapped	6
Physically Handicapped	3
Gifted	6
Trainable Mentally Retarded	12
Parents:	
Educable Mentally Retarded	15
Extreme Learning Problem	15
Emotionally Disturbed	5
Speech	15

Deaf	5
Visually Handicapped	5
Physically Handicapped	5
Gifted	5
Trainable Mentally Retarded	10
Clinic Directors	15
Superintendents of Institutions	5
Members of Special Interest Groups	18

All data compiled from the questionnaire, with the exception of those questions which were open-ended, were tabulated by computer. The open-ended questions were treated individually and were examined to determine commonality of responses. Responses were then categorized accordingly. It was this process which delayed the final tabulation of data since so many questions were open-ended and their tabulation was unwieldy and difficult to present. However, the final tabulation of data does include these categories of open-ended responses.

The documents containing the detailed tabulation of data are on file and available from the Oregon Board of Education.

Once the results were tabulated they were reviewed by the special education staff members of the Oregon Board of Education who examined them, questioned them and asked for clarification on certain points.

After the results were examined by the special education staff members from the Oregon Board of Education and the necessary clarification of presentations made, the results were presented to the members of the Oregon Needs Study Board.

It was the Oregon Needs Study Board who interpreted the data and reached conclusions relative to the primary needs in each handicapping condition and the major needs in special education throughout the state. The procedure by which they reached this conclusion was to vote on the major needs in each area and then by separate vote prioritize those needs.

Results

The Oregon Needs Study Board specified the major needs by handicapping conditions as follows: (The needs are listed in the order of priority within each handicapping area.)

Deaf

1. Vocational counseling and placement and expansion of vocational programs.
2. Teacher training needs to be improved.
3. Parent training programs need to be inaugurated.

It should be emphasized that all but three members of the Oregon Needs Study Board felt that vocational counseling and placement and expansion of vocational programs should receive the highest priority of needs in the education of the deaf.

Hard of Hearing

1. Vocational counseling and placement and expansion of vocational programs.
2. Teacher training needs to be improved.

All but two of the members of the Oregon Needs Study Board felt that vocational counseling and placement and expansion of vocational programs should be given the highest priority of needs in this area of handicapping condition.

Visually Handicapped

1. Vocational counseling and placement and expansion of vocational programs.
2. Parent training programs are needed.

All but three of the members of the Oregon Needs Study Board felt that vocational counseling and placement and expansion of vocational programs should receive the highest priority of needs in this handicapping condition.

Educable Mentally Retarded

1. Vocational counseling and placement and expansion of vocational programs.
2. Teacher training needs to be improved.

All but two of the members of the Oregon Needs Study Board felt that vocational counseling and placement and expansion of vocational programs should receive the highest focus of needs in this handicapping condition.

Trainable Mentally Retarded

1. More programs should be established for the trainable retarded.
2. The shortage of trained teachers should be remediated.
3. Teacher training needs to be improved.
4. Parent training programs are required.
5. Vocational counseling and placement and expansion of vocational programs.

All but two of the members of the Oregon Needs Study Board listed more programs for the trainable retarded as the highest priority of needs in this handicapping condition.

Multiple Handicapped

1. Teacher training needs to be improved.
2. Shortage of teachers needs to be remediated.

The members of the Oregon Needs Study Board divided their opinions on this particular handicapping condition. Of those voting, five indicated the teacher training category and three indicated the shortage of teachers as requiring the highest priority.

Physically Handicapped

1. Vocational counseling and placement and expansion of vocational programs.
2. Parent training programs are needed.

All but two of the members of the Oregon Needs Study Board listed vocational counseling and placement and expansion of vocational programs as the greatest need for this handicapping condition.

Emotionally Disturbed

1. More programs are needed.
2. Teacher training needs to be improved.
3. Parent training programs are needed.
4. Shortage of teachers needs to be remediated.

All but two of the members of the Oregon Needs Study Board favored the need for more programs as the first priority in this handicapping area.

Extreme Learning Problem

1. More services are required for extreme learning problem children.
2. Teacher training needs to be improved.
3. Parent training programs are needed.
4. The distinction between remedial reading and extreme learning problems needs to be clarified.

Only four of the members of the Oregon Needs Study Board listed the requirement of more services as their first priority. Two of the members listed teacher training as their first priority. One member abstained in voting in this category and one member each voted for the other two major areas as the first priority.

No major needs were listed in the area of the gifted or in the area of unwed mothers.

A summary of the above categorization and needs indicates that in five of the areas – deaf, hard of hearing, visually handicapped, educable mentally retarded and physically handicapped, vocational training programs were emphasized as a major need. In three other areas – trainable mentally retarded, emotionally disturbed and extreme learning problems, the establishment of more programs or services was listed as a major need. The area of multiple handicapped focused on teacher training and shortage of teachers.

A slightly different perspective of the results presents itself when the Oregon Needs Study Board members examined needs across handicapping conditions. They arrived at the following list of priorities:

1.	Preschool education of handicapped children.	144
2.	Vocational counseling and placement and expansion of vocational programs.	143
3.	Teacher training needs to be improved.	124
4.	Identification of children's functional needs.	124
5.	The modification of labeling of children to reflect functional behavior of the child and desired prescriptive program.	124
6.	Parent training programs are needed.	117
7.	More programs for the trainable retarded.	95
8.	In-service training in methods and materials, curriculum development and behavior modification.	93
9.	Overall purposes, objectives and goals stated by the Oregon Board of Education for special programs.	88
10.	Remediate shortage of trained teachers.	82
11.	School psychologists are needed in the school district.	77
12.	In-service training for directors of special education and administrators relative to programming methods and curriculum.	74
13.	Need for aides, volunteers and paraprofessionals.	66
14.	Speech correctionists need to become more involved in language programs.	58
15.	Need for universities and the Oregon Board of Education to research teacher training.	56
16.	Need for local districts, Oregon Board of Education and outside agencies to research vocational training.	51
17.	A distinction between remedial reading and extreme learning problems needs to be made.	40
18.	A need for more prompt notice that federal funding is awarded.	34

These needs were prioritized and the points arrived at in the following manner: Eighteen needs had been specified across handicapping conditions by the Board after an examination of the data. These are the eighteen specified above. Each member of the board was asked to rank each of the needs. Each first place listing was worth eighteen points; each second place listing was worth seventeen points; third place, sixteen points and so on to the eighteenth place. which was worth one point. Ten members of the Board voted, thus permitting a maximum score of 180 points for any one need. Two of the members of the Board did not prioritize all 18 but only those for which they felt a major need exists.

An examination of the detailed replies given to the above list of needs indicated that preschool education and vocational counseling received almost an equal number of points. Preschool education, in fact, had only one more point than the vocational counseling category with the total number of points being considered for these two, 144 and 143 respectively.

The next three categories – teacher training improvement, modification of labeling and identification of children all received the same number of votes (124), but were 20 points behind each of the two leading categories. Parent training received 117 points. According to the results, these might be considered a second order of needs.

After these six leading needs, the remaining expressed needs were at least 20 more points behind and ranged from 95 points for more programs for the trainable retarded down to 34 points for the last need.

It is obvious that what is being said by both the respondents in the field and by an analysis of the data by the Oregon Needs Study Board is that services at either end of the educational system need money, effort and improvement. Preschool education for the handicapped child is considered a major priority as is vocational counseling, placement and training.

Recommendations

In conducting a study of this type the formulation of questions and the personnel asked to be respondents are all open to criticism. This is especially so in this particular study, which was the first of its type in special education in the State of Oregon. However, it is believed that the results that are presented herein are valid and represent the desires and wishes of the people concerned with special education in the State of Oregon. These are their perceived needs. These needs are where efforts must be made to upgrade special education.

Results and Discussion

Eighteen projects were funded during the period from September, 1971 through August 31, 1972. Seventeen projects were funded for the academic year from September to June and one project, that at Holladay Center, was funded for the summer only. Six projects provided services primarily to emotionally disturbed children, although one of these was a TMR population which was categorized as emotionally disturbed; four projects focused on learning disabled children; two projects were concerned with TMR parent training; and two projects were for the physically handicapped (one of these was the summer project at Holladay Center). There was one project each for the deaf, the educable mentally retarded, multiple handicapped, and speech. The number of children served by these projects was as follows:

Emotionally Disturbed	199
Learning Disabled	185
Trainable Mentally Retarded	27
Physically Handicapped	144
Deaf	33
Educable Mentally Retarded	18
Multiple Handicapped	45
Speech	111

The total cost for this entire program was $12,545. This averaged to $16.46 per child.

The main features of each project are discussed in detail in the individual project reports. Some general comments and features about the entire program are discussed in this section.

It was noted in **Impact 5 of the Title VI Programs in the State of Oregon**, September 1970 to August 1971, that an emerging area of concern in special education was the education of behavior problem children, specifically at the junior high school level. Six projects during this funding period devoted themselves to behavior problem children, obviously reflecting a growing need for special services of this type in Oregon. Three of these projects focused on the adolescent age group pinpointed last year as a major area of need. Two of the projects, Parkrose and Bend, were repetitions from the previous year. An additional project, Clackamas IED, focused on adolescent children who have already been classified as delinquents. It is interesting to note that of these three projects only one, that at Parkrose, made any significant gains with these children. This phenomenon may be explained in part, at least, by the fact that of the three projects Parkrose was the only one that utilized a systematic structured approach to the remediation of behavior problems. It has often and repeatedly been demonstrated that children with behavior problems are best handled in a structured situation, most often utilizing behavior modification techniques. This fact is further drawn out by the success of the project at Bethel, Lake Oswego and Shangri-La. All three of these centers dealing with younger children utilized behavior modification techniques and demonstrated improvement in the children to a degree which should point the way to the correct model for handling behavior problems.

Four of the projects focused on learning disabled children. All of these were concerned with what we might term early childhood education, either at the preschool or early primary grades. Once again, the Distar method of instruction has been demonstrated as having a great deal of power as a curriculum item to help learning disabled children. This factor was demonstrated both at the Central Point project and the Lake Oswego project. These projects also demonstrated the value of early childhood education for handicapped children. Because of the intervention provided at this early age more of these children are going to be able to function in a regular classroom.

In **Impact 4 of the Title VI Programs in the State of Oregon**, September 1969 to August 1970, on page eleven, the third party evaluation team made some recommendations relative to Title VI funding. These were considered worth reiterating on page 9 of **Impact 5 of Title VI Programs in the State of Oregon**, September 1970 to August 1971. They are still considered germaine and are an area of special concern of education in the State of Oregon. Therefore, they are repeated again:

> The educable mentally retarded is one of the largest handicapped population; the classes that service this population have come into the most criticism in the field of special education, since it is claimed that they have failed to produce the type of results expected. The third party evaluators, therefore, believe that experimentation with new methods or models in this area might be especially fruitful in future Title VI projects.

It should be noted that in the current funding year, 1972-1973, at least one such model at Ashland has been funded and will be reported in **Impact 7**. During 1971-1972, the year being reported upon in this document, one such model at Hermiston for nine educable mentally retarded children was also funded. This project attempted to integrate EMR students into regular programs. The major result was less nonacceptance of students, although the results cannot suggest greater acceptance. There was no academic gains of significance and no changes in parental attitude. These disappointing results suggest the need for further efforts at model and technique experimentation. A specific suggestion might be the funding of EMR self-contained classrooms which employ total behavior modification programs, incorporating many of the Distar techniques. These types of structured environments have been demonstrated as successful with preschool and primary grade learning disability children. It is logical, therefore, that these types of environments might also be successful with EMR populations. If such models exist around the state they have not been adequately publicized as to whether they demonstrate productivity in the learning of EMR children.

It should be noted that during this past year an administrative difficulty has arisen which has not manifested itself since the first year of Title VI funding, namely, the submission of late reports by funded projects. In two instances reports were submitted which were incomplete. In one case the report had to be returned for resubmission; in the other the third party evaluation team had to piece together the information which should have been included in the final report. It is recommended by the third party evaluation team that the final payment for projects should be contingent upon the submission of the final report in its proper form.

The third party evaluation team continues to believe that the stringent evaluation measures which have been applied to Title VI programs in Oregon have resulted in a steady increase in the quality of these programs. We believe that the services rendered to children in these programs have improved significantly since the beginning of Title VI funding. Moreover, because of the extensive experimentation in new models of special education sponsored under Title VI, we believe there is a large potential impact on the structure of special education in Oregon. To further enhance the quality of Title VI programs within the state, however, the recommendation which was made on page ll of **Impact 5 of the Title VI Programs in the State of Oregon**, is hereby repeated since it is still believed to be pertinent:

> Further improvement in the quality of Title VI projects can occur if the Ad Hoc Committee which recommends funding for these projects will require that all objectives submitted in Title VI proposals be stated in behavioral terms.

Too often, the third party evaluation team must consult with the projects and revise the objectives in their initial meeting with the project director. Care is taken not to change the nature or the scope of the project, but there is always the danger that this can occur once the objectives have been reworded. Therefore, to avoid that possibility of undue influence by the third party evaluation team in the scope of the project, the Ad Hoc Committee should ensure that the objectives are stated in behavioral terms.

In summary, the third party evaluation team would like to stress the following points relative to Title VI programs for the period September, 1971 through August, 1972:

1. The utilization of behavior modification techniques with the emotionally disturbed projects continues to be the most powerful methodology and philosophy to produce change where children are exhibiting behavior problems in school.
2. The value of Distar as a tool in the remediation of learning disabilities at the early childhood level has once again been demonstrated.
3. More evidence has been gathered for the value of preschool education for handicapped children.
4. The technique developed for evaluation of Title VI programs within the State of Oregon continues to contribute to the quality of not only individual projects but also special education within the state.

Title of Project:	*Program for Preschool Multiple Handicapped*
Location:	*Linn-Benton Intermediate Education District, Albany, Oregon.*
Type and Number of Children Served:	*4 mentally retarded, 2 crippled, 3 multiple handicapped. An additional three were served by home programming.*
Funding Allocated:	*$10,513*
Project Beginning Date:	*September 7, 1971*
Project Ending Date:	*June 2, 1972*

Background and Rationale:

There were no educational facilities available to multiple handicapped preschool children within the area of Linn County at the time of the initiation of this project. A population of handicapped preschoolers was known to exist; however, it was believed when the services became available more children would be identified. On the basis of research and the on-going education of school age retarded, the Linn-Benton Intermediate District felt that there was need for a preschool class and that such a class would provide valuable early education experience to the children involved. The project would also include a strong component in parent training since preschool training is of little value if parents do not cooperate in training procedures in the home.

Objectives and Evaluation Plan:

1. To provide a program of self-help, social skills and motor development for trainable mentally retarded.

In the beginning the child will be evaluated to determine his present skills and needs. Daily records will be maintained of the child's progress so that during the school year trends in improvement can be discerned, comparing them to modifications in the individualized program.

2. To provide a program of language development.

Both expressive and receptive language will be a major concern of this program. The evaluation for language development will be basically the same as for Objective 1, with the exception that the Revised Expressive Language Program under the direction of John McDonnell will be used.

3. To provide in-service training for parents of trainable mentally retarded.

The evaluation of the parent program will be an extension of the evaluation of the individualized programs operating at the school. These parents will be reinforcing these identical behaviors at home. The data should reveal more rapid progress in those individualized programs that are operating in the home and school as compared to those operating only at school.

4. To provide in-service training for teachers and aides of trainable mentally retarded.

If the evaluation of student progress indicates improvement in the various skills, it must be assumed that the teacher and aides were well trained and were utilizing their knowledge effectively.

5. To demonstrate the need and value of preschool training for mentally retarded.

The need and value of preschool training cannot be determined as the result of one year's work, but we believe that over a period of several years those given this early training will perform at younger ages and at higher levels. The statistics will be maintained over this period of time so the hypothesis can be supported.

Methodology:

This project was conducted from September 7, 1971 to June 2, 1972. Classes were held from 9:00 a.m. to 11:15 a.m. five days a week. The class, restricted to six children at any one time due to space limitations, was held in a classroom of a public high school in the Albany, U-8 School District. The children served ranged in age from 18 months to 8 years. Staff included a teacher and a teacher aide. The program included in-service training for the teacher and the aide and parent training. Children were to be given individualized instruction depending upon each child's needs. Records, data and graphs were charted regularly and progress was noted.

The in-service training was conducted prior to the commencement of the preschool operation. In-service included one day of lecture and demonstration of the principles of behavior modification. This was followed by four days of practical application in which the teacher and aide worked with children. These sessions were video taped and played back to the staff with critiques by the consulting staff of Teaching Research.

Results:

1. To provide a program of self-help, social skills and motor development for trainable mentally retarded.

The following data are a compilation of individualized programs conducted with the preschool students in the curriculum areas of self-help, social skills and motor development.

T.P. T.P. is a five year old male with Down's Syndrome and a moderate conductive hearing loss (discovered in May, 1972). This boy was a behavior problem at home and school when he entered the program in September, 1971. He did not dress himself, had no vocalizations and was not toilet trained.

During the school year T.P. was presented with approximately fifteen individual prescriptive programs. Examples of these programs include reducing urinations in diapers both at home and in school from 12 times per day to 4 times per day over a five month period. He learned to discriminate blue from red and yellow by pointing. He could place a cylinder, square and rectangle into a shape box with all holes exposed and was working on the triangle when the project ended. In addition, he learned to put on his socks, coat and underpants. Some deviant behaviors that were also eliminated were chair tipping, standing while on potty and hitting other children. Figures 1 and 2 and Table I represent the progress made in the various steps of putting on socks and decelerating hitting behavior.

C.R. C.R. is a six year old trainable mentally retarded

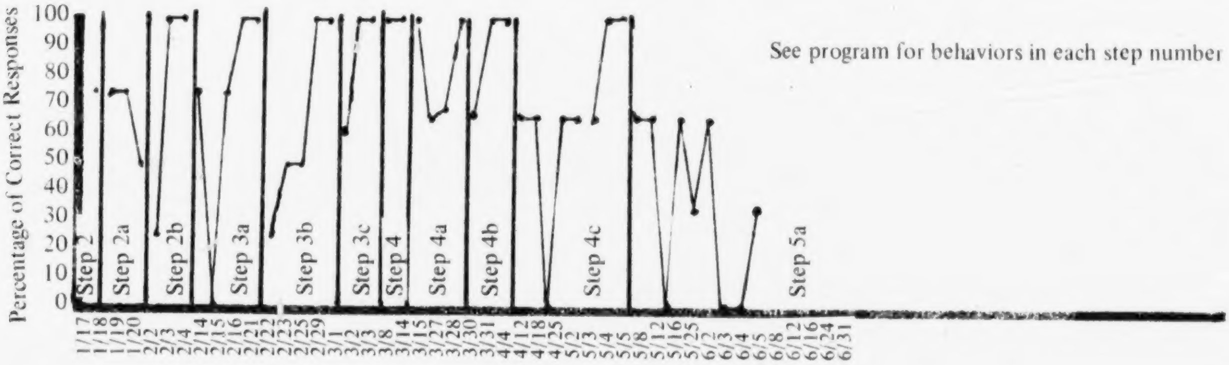


Figure 1

T.P.

Put on Sock

Criteria: Three consecutive correct responses, 2 consecutive days

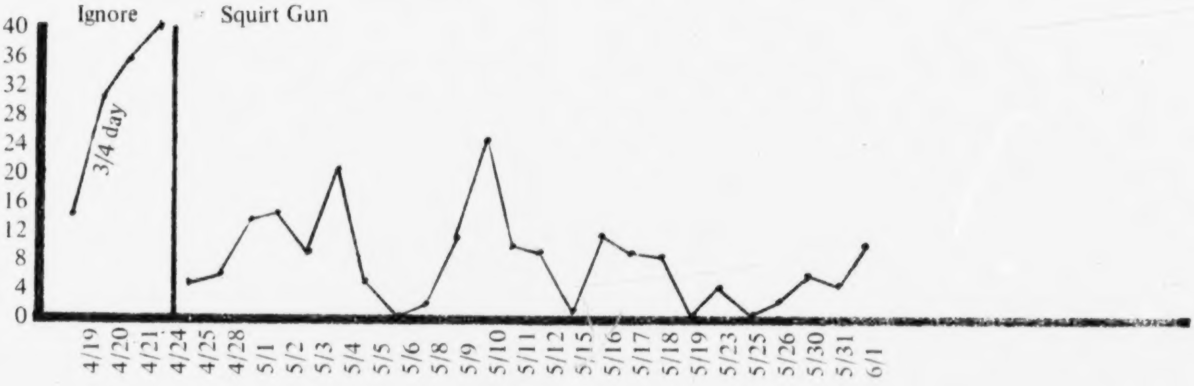


Figure 2

T.P.

Timmy's Hits

Table I

Task Objective: **To Put on Socks**
Materials: Socks to fit child
Prerequisite: Child shows interest in dressing himself
Criterion:
Pre/Post Test: Same as Task Objective. If student fails, enter him at step prior to the one in which he failed.

If sock is bunched, shake out, pull long, lay on flat surface. Look for the heel (which will have a contrasting patch on it to be gradually phased out later). Once heel is located, flatten sock in angle, heel always in lower left, cuff, cuff to northwest, toe to east (as on a map).

1. Adult with right hand will grasp top layer of cuff in thumb and first fingers, lift slightly, then grasp lower layer with left hand, same fingers. Put toe into sock top, hands at sides of foot, and pull to instep, over it. Release the cuff and gently in pinching motion, grasp sock over little toe and beside big toe, pull toward instep. Repeat this motion as often as necessary to bring sock snugly over toes. With thumb and first finger grasp cuff under arch and pull over heel and up leg as far as possible. Again grasp cuff in thumbs and fingers, pull up to straighten.
2. Adult applies sock, child pulls up final 1/3 of cuff.
   a. final 2/3
   b. pulls up all of cuff from ankle
3. Hand-over-hand, using pinching motion, pull up to snug toes into sock
   a. child pulls final 1/3 of sock
   b. child pulls final 2/3
   c. child can snug up whole sock, pull around heel, smooth up leg.
4. Hand-over-hand, pull sock from under arch to back of heel.
   a. child pulls final 1/3 of distance
   b. final 2/3 (over widest part of heel)
   c. from arch to ankle and up leg.
5. Hand-over-hand, hold cuff open and fit onto toe.
   a. child can put own toe into cuff, holding cuff alone.
6. Hand-over-hand, pick up top and bottom layers of cuff as described in number 1.
   a. Adult picks up top layer in his right hand, child picks up bottom layer in his left hand, then takes adult's cuff and applies to own foot.
   b. Child can pick up both layers correctly alone.
7. Adult picks up top layer in his right hand, child picks up bottom. Adult will point out patch on heel, lay sock out pulling it long as he does so, cuff in left hand, toe in right.
   a. child pulls toe as adult pulls cuff
   b. child pulls toe and cuff to straighten
   c. child can identify heel patch and, taking it in left hand, lay sock on table to straighten.
8. Child should be able to put on a properly marked sock all alone. Now begin phasing out mark or patch daily.

girl. When she entered the program in September, 1971 she had had two previous years of preschool training. C.R. spoke in two word phrases, did not sit at a desk or attend to a task and had little fine motor coordination.

C.R. was on 15 individualized prescriptive programs. At the beginning of the school year C.R. could sit at a desk for 5 minute periods and did not attend to a task while sitting. She was put on programs for sitting at a desk and attending to a given task. She learned to sit for 30 minute periods and complete 5 tasks in that period of time. She learned to identify her last name and identify capitol letters A-D. C.R. exhibited an inappropriate social behavior at home by giving short piercing screams. Baseline, her rate of screams were 35-85 screams in ½ a day. After one month of treatment her screams decelerated to 0 and remained that way for the remainder of the school year.

Figures 3 and 4 and Table II represent progress she made in some of the programs.

S.D. S.D. is a five year old girl in a wheel chair with Spina Bifida. S.D. entered the program in April, 1972. S.D.'s mother was very protective and S.D. cried when left at school. She would not respond verbally to the staff and had no skills in coloring, games, writing, etc.

S.D. was in the class for two months. During that time she was placed on 10 individualized prescriptive programs. She worked on identification of capital letters A-D, coloring within a given area with an outline, writing the last two letters of her given name, identification of her last name, writing numbers 1 and 2 and other programs. She was placed on a program to extinguish inappropriate time talk outs in class and a program to extinguish crying when she did not want to respond when asked a question and/or given a direction.

Figures 5 and 6 and Table II represent the progress she made in two months.

R.F. R.F. is an eight year old Down's Syndrome male. He had two previous years of training in a TMR class. He was immobile, was not toilet trained and had no receptive or expressive language. He could grasp large objects when asked to do so and did not appear to respond to children or adults.

R.F. was engaged in six programs during the school year. He progressed from crawling to walking while holding on to a rubber hose, with two falls for twenty feet. Baseline testing indicated he could not do sit-ups; at the end of the year he could do ten sit-ups with no help. He learned to take off his coat without assistance and put on socks with assistance.

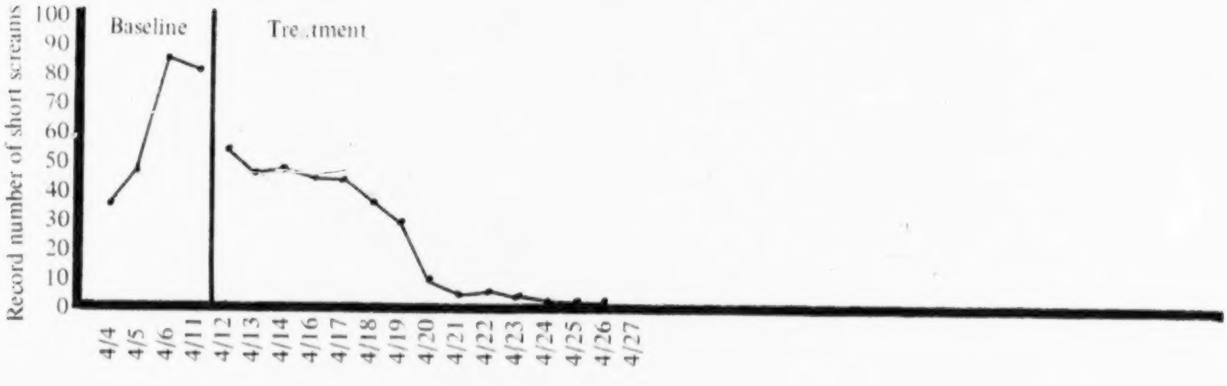


Figure 3

C.R.

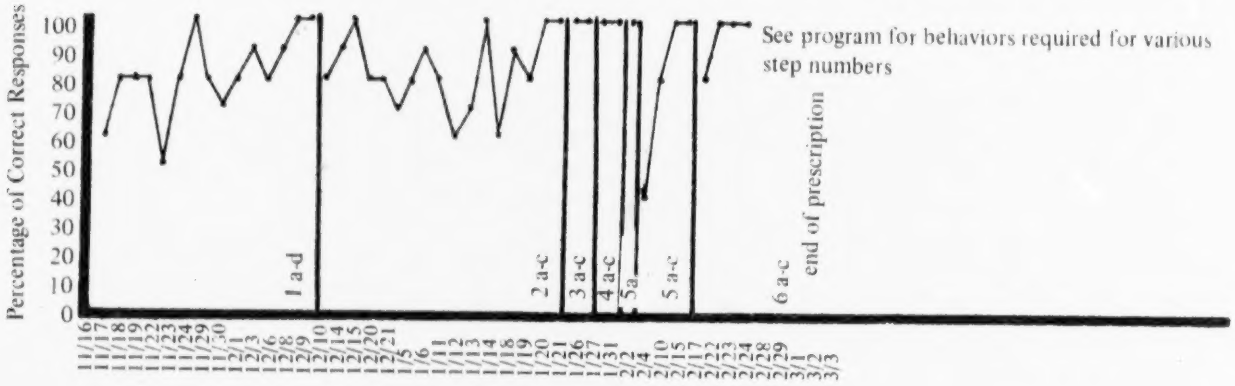


Figure 4

Indentification of last Name
C.R.

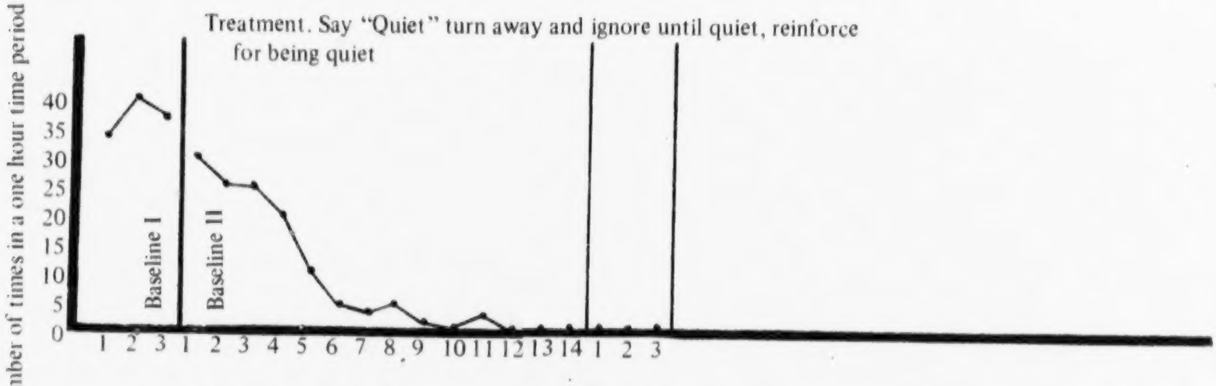


Figure 5

S.D.
Inappropriate Time Talk Outs in Class

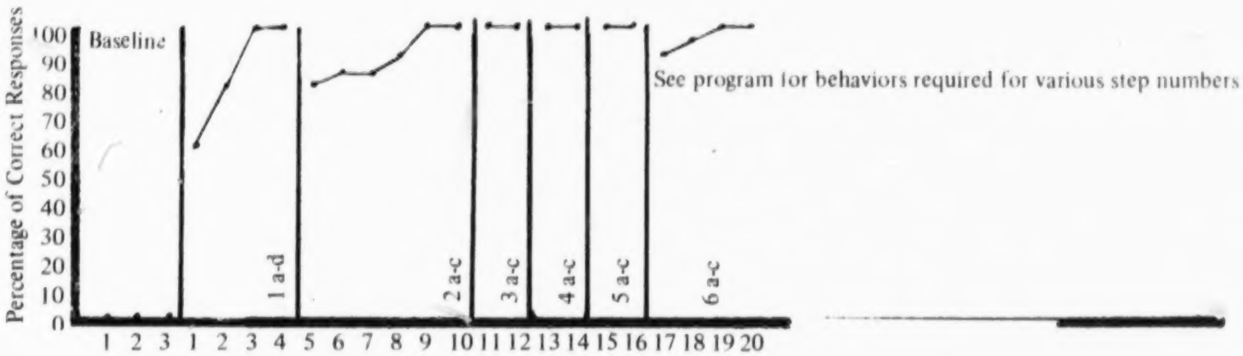


Figure 6

S.D.
Identification of Last Name
Criteria is two consecutive correct responses

Table II

Sequence: **To Learn and Identify Given and Last Name** (combination letters)
Materials: flashcards; on each – child's name and three others including given and last names, eight cards total
Phase I – learn first (given) name
Phase II – learn last name

1. Work with the child's name.
   a. Say, "__, this is your name; here (point to it) is your letter __. This says__. (child's name)"
   b. Say, "__ this says__. What does it say?"
   c. Say, "__, what does this say?"
   d. Say, "What does this say? "
2. Work with child's name and__.
   a. Say, "__, this is your name. Point to your name." (On Left)
   b. Say, "__, point to your name." (Random Order)
   c. Say, "Point to your name." (random order)
3. Work with child's name and__.
   a. Same as 2a.
   b. Same as 2b.
   c. Same as 2c.
4. Work with child's name and__.
   a. Same as 2a.
   b. Same as 2b.
   c. Same as 2c.
5. Work with child's name and two others:__and__.
   a. Same as 2a.
   b. Same as 2b.
   c. Same as 2c.
6. Work with child's name and three others:__and__.
   a. Same as 2a.
   b. Same as 2b.
   c. Same as 2c.

Figure 7 and Table III represent progress made on taking off his coat.

Table III

Removal of Coat

1. Coat off – holding by collar or hood
2. Removes coat with one arm half in – grasp collar opposite hand
3. Removes coat with one arm in
4. Removes coat – one arm in; one half in
5. Removes coat from shoulders
6. Removes coat – unzipping and disengaging
7. Removes coat – unbottoning
8. Removes coat – hangs up with verbal instructions
9. Removes coat – hangs up, unsupervised

J.P. J.P. is a two year old male with Down's Syndrome. His development lag is mild with the exception of delayed language. He was not toilet trained and did not follow basic one step commands when he entered the program in November, 1971.

J.P. was on a toileting program to reduce urinations in both the school and home. Although this program was conducted for three and a half months, little change occurred. Baseline for urinations was approximately four per day and remained there throughout the project period. He moved through four steps in a program to zip a zipper on his coat. He learned to discriminate three colors (yellow, blue and red). By May 29, he could place three shapes (circle, square and rectangle) into a shape box with all holes exposed.

Figure 8 and Table IV represent examples of the progress made in some of the programs.

B.M. B.M. is a six year old male with Down's Syndrome. Upon entering the program in September, 1971 he had had

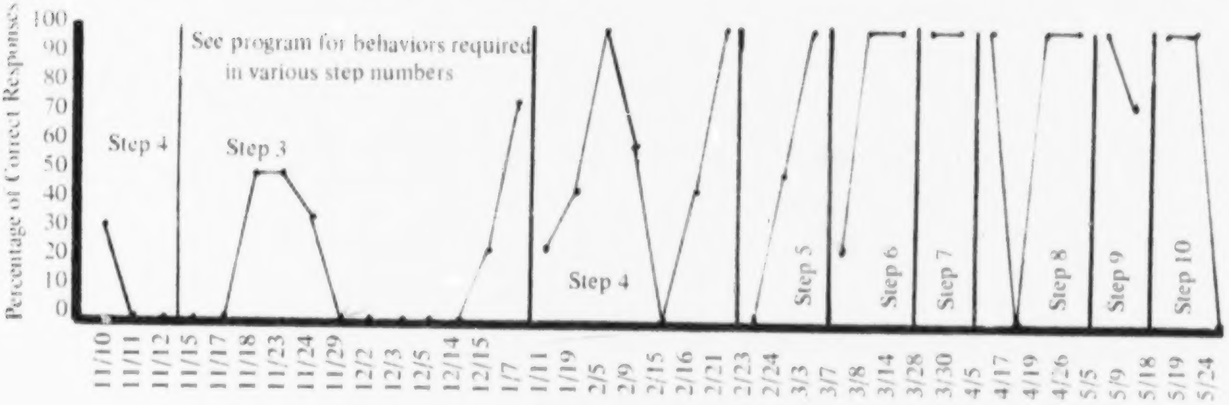


Figure 7

R.F.
Take off Coat

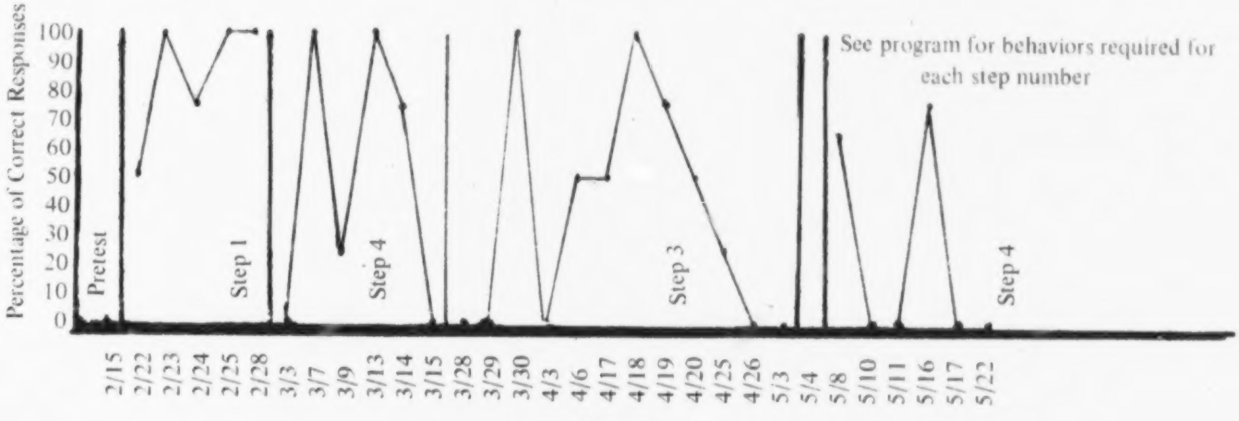


Figure 8

J.P.
Zip a Zipper

Table IV

Sequence: ***Zip a zipper***
Materials: Jacket with large zipper in front of it, or zipper frame.

Arrange jacket on table in front of child with collar end near to child. If zipper is long or child has difficulty, start steps with zipper already zipped up 3/4 way, then 1/2 way, 1/4 way and then zipper open all the way (but completely engaged if it is one that separates at the bottom.)

1. Using thumb and index finger (index finger on top) adult pulls zipper towards self while child watches. Adult says, "See, I'm zipping the jacket."

2a. Adult places child's thumb and index finger on zipper pull tab, holds them there and helps child pull the zipper towards self.

2b. Same as step 2a, but child does the pulling after adult places child's fingers on tab (helps hold them there if necessary).

2c. Adult places child's fingers correctly on tab, child maintains grasp on tab and pulls it up by himself.

2d. Child grasps pull tab correctly and pulls zipper closed by self. If necessary, adult holds jacket near bottom of zipper to give tension against which child can pull.

3. Child holds jacket near bottom of zipper with one hand, pulls zipper towards self with other hand.

4. Put jacket on child and repeat as many of steps 1 thru 3 as necessary until child can zip completely independently when asked to "zip the jacket."

two years of previous preschool experience. B.M. had gross motor coordination but little fine motor coordination. He did not do independent work and sat for approximately 15 minute periods. B.M. spoke in 3-4 word phrases.

During the school year B.M. was presented with 25 individual prescriptive programs. Examples of the programs include writing last name, writing capital alphabet letters A-M, writing numbers 1, 2 and 3 and writing his complete address. He learned to do his writing skills in an independent setting. B.M. came into the program sitting for a 5 minute period working on a task and at the end of the school year he sat for one hour working on independent writing skills. He also learned to snap his pants and hang up his coat.

D.F. D.F. is a five year old emotionally disturbed male functioning as retarded. When he entered the program in September, 1971 he had had one previous year in a trainable mentally retarded program. He was not toilet trained when school began and he spoke in single words. He exhibited bizarre hand motions, would not sit at a desk and had frequent tantrums.

D.F. was frequently absent during his short stay in the program. He made little or no progress during this time. He did work on a language program which will be discussed in the next objective.

Each child in the preschool program participated in some type of language training during the school year. The following is a description of the progress made by each child in various language programs.

J.P. This child initially worked on eye contact programs until he could maintain eye contact with the trainer for ten seconds. Subsequently, he was placed in a receptive language program where he demonstrated he could identify fifteen objects by pointing when requested to do so. Figure 9 is a representation of the progress made on that task.

S.D. This child was engaged in the project for only three months. Her oral language level was sufficiently high and she was not placed in a formal language program; however, she was involved in a Doman Reading Program. During one and a half months S.D. could read six words when they were presented on flash cards. Figure 10 represents her progress on this program.

C.R. Between September 17, 1971 and May 28, 1972 this child was presented with five different language sequences. She reached the criterion level of acceptable behavior on 134 behaviors with a total instruction time of fourteen hours and twenty-one minutes. Table V is a graphic summary of her progress in these programs.

R.F. This child was so severely retarded that the only progress made during the school year was attending to the trainer for a five second period of time.

D.F. Between September 17, 1971 and January 24, 1972 this child reached criterion level of acceptable performance on 55 language behaviors. Table VI represents the progress made during instruction.

B.M. Between September 17, 1971 and May 28, 1972 this child acquired 150 language behaviors. The total instruction time was 15 hours, 20 minutes. Table VII represents his progress.

T.P. This child could attend to the trainer for ten seconds at the conclusion of the project. Initially, he had no attending behavior. At the conclusion of the project he could identify 27 objects by pointing. At the beginning he could identify none.

3. To provide in-service training for parents of trainable mentally retarded.

Each of the parents whose children were in the preschool program participated in the parent training

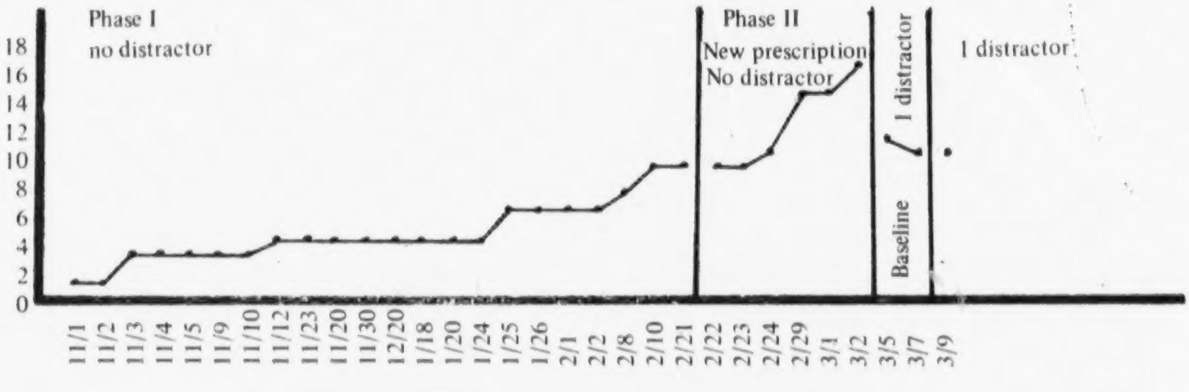


Figure 9

J.P.
Identify Objects by Pointing
Criteria is 3 consecutive correct for two consecutive days

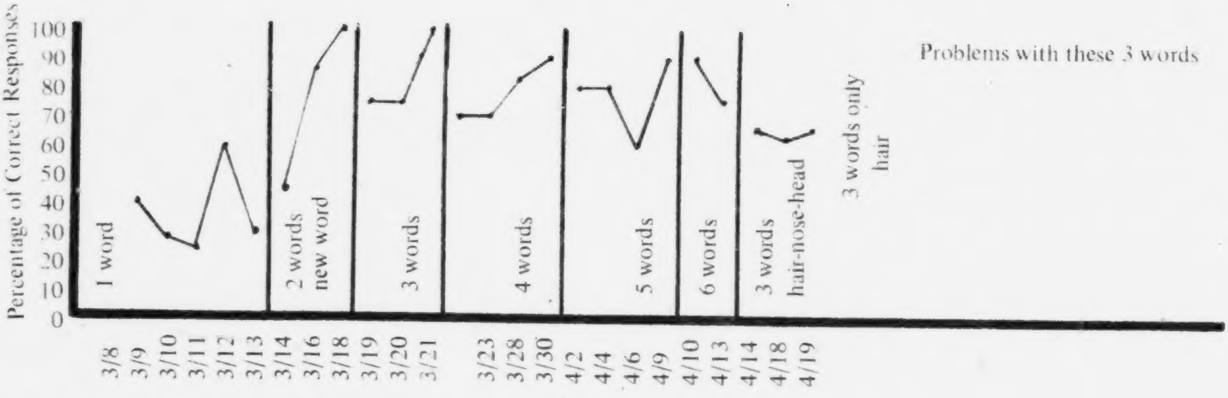


Figure 10

S.D.
Doman Reading

Table V

Language Training

Dates	Program Number	Program Name	Number of Behaviors reached criterion level	Number of minutes of instruction
9/17 to 10/27	2	Imitation of motor	20 behaviors	2 hours 3 minutes
9/17 to 1/25	5	Imitation of sound blends	43	6 hours 12 minutes
1/25 to 3/26	6	Imitation of words	36	3 hours 12 minutes
3/26 to 4/28	7	Naming pictures and objects	24	2 hours 24 minutes
4/25 to 4/1	10	Imitation two, three and four word chains	11	15 minutes
9/17 to 5/28	5 programs	Totals	134	14 hours 21 minutes

Table VI

Language Training

Dates	Program Number	Program Name	Number of Behaviors reached criterion level	Number of minutes of instruction
9/17 to 1/24	4	Imitation of consonants and vowels	35	3 hours 28 minutes
9/17 to 1/24	6	Imitation of words	20	2 hours 15 minutes
9/17 to 1/24	2 programs	Totals	55	5 hours 43 minutes

Table VII

Language Training

Dates	Program Number	Program Name	Number of Behaviors reached criterion level	Number of minutes of instruction
9/17 to 5/28	10	Imitation four word phrase	67	5 hours 12 minutes
9/17 to 5/28	11	Responding complete phrase	83	10 hours 8 minutes
		Totals		
9/17 to 5/28	2 programs		150	15 hours 20 minutes

program. This program consisted of four evening slide-tape presentations on behavior modification theory. During these sessions parents learned to utilize these principles and to present prescriptive programs in the home. These programs were run in the home and the data were monitored by the teacher. The teacher made changes in the programs as they were required. Figures 11, 12, 13 and 14 are examples of programs run by all parents.

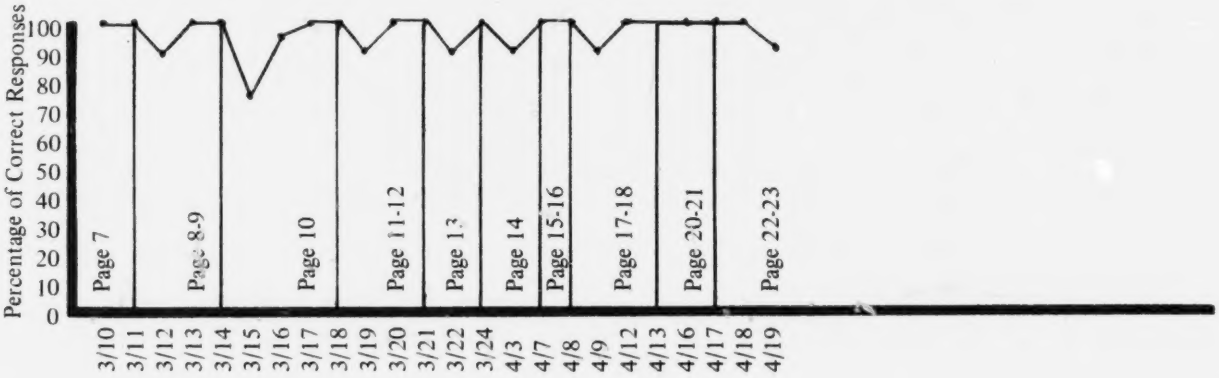


Figure 11

Parent 1

Bright and Early Reading Program, *The Eye Book*

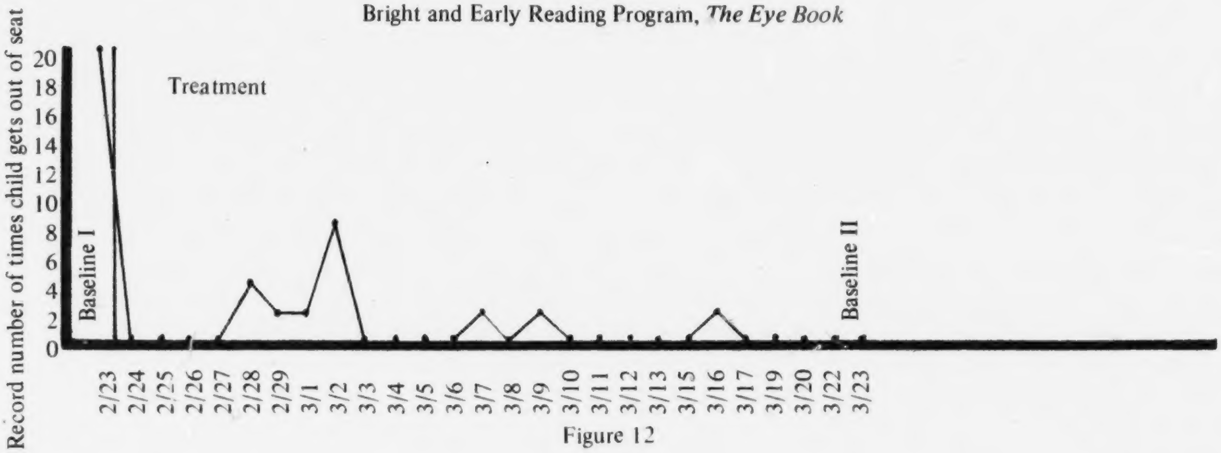


Figure 12

Parent 2

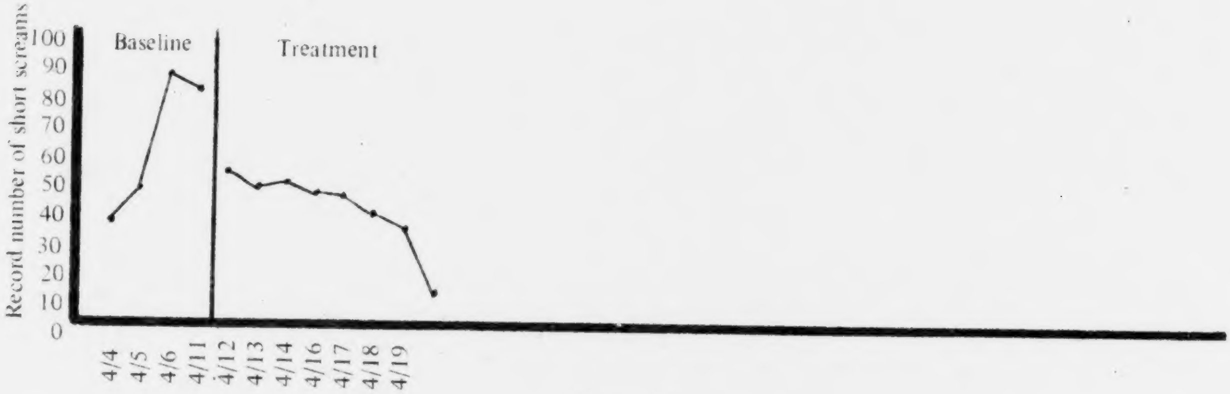


Figure 13

Parent 3

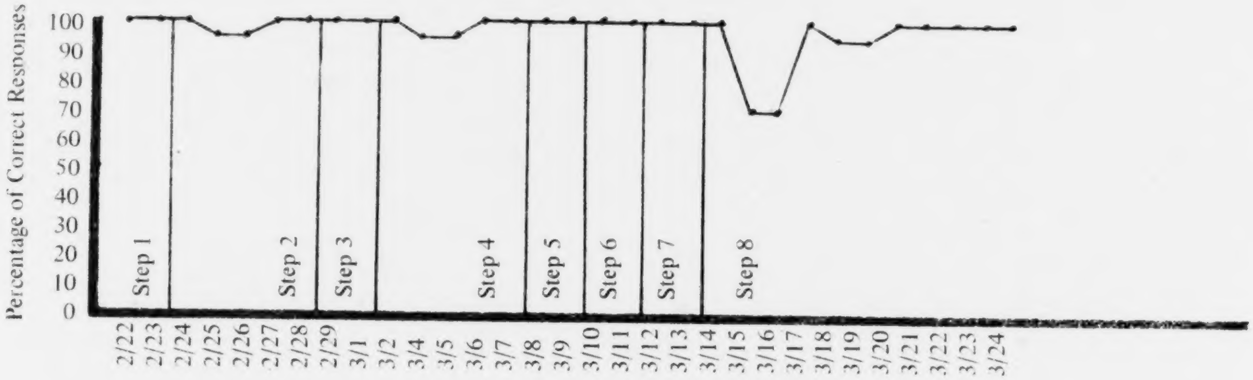


Figure 14

Parent 4
Buttons Shirt

4. ***To provide in-service training for teachers and aides of trainable mentally retarded.***

The results of Objective 4 are reported in Objective 1.

5. ***To demonstrate the need and value of preschool training for mentally retarded.***

Each of the students enrolled in the preschool class are still enrolled in the classes for TMR in Albany. The amount of progress noted during this school year more than justifies the need for preschool classes for the trainable mentally retarded.

Third Party Evaluator's Comments:

The Linn-Benton I.E.D. has met all of the objectives which were proposed. Each of the children involved in the program made gains which were commensurate with their ability.

The effectiveness of preschool training for the TMR child cannot be denied. Severely retarded children require more training than the "normal" child. Beginning their education at a younger age is a viable solution to this problem. In addition, parent training is another method of increasing instruction time with this population. Both of these were incorporated in this project.

One minor criticism of the project is that while excellent data were taken on each child, there were instances where changes were not made in programs when the data indicated that changes needed to be made.

However, this project must be considered an overwhelming success and the staff should be commended for an excellent job.

Title of Project: *A Child Management Project for Trainable Retarded Children in Beaverton*

Location: *Beaverton School District 48, Aloha Center*

Type and Number of Children Served: *20 Trainable Retarded*

Funding Allocated: *$3,700*

Project Beginning Date: *September 1, 1971*

Project Ending Date: *June 30, 1972*

Background and Rationale:

It was hypothesized that management procedures could be implemented concurrently in the home and school environments through training parents to utilize operant guidance techniques in dealing with behaviors of their children. A child management program originally developed in a clinical setting by Dr. Constance Hanf, Crippled Children's Division, University of Oregon Medical School, was selected as the model to be utilized for parent training in the School District TMR facility.

The efficacy of training teachers who would in turn instruct parents was a primary concern of those conducting this project. The selection of the C.C.D. model was influenced by the premise that a package in which procedures were predetermined could be utilized effectively by teachers. Hopefully, the type of services that had previously been provided exclusively by professionals and specialists in a diagnostic milieu could be offered to parents by the agency providing on-going training for the child.

Recent trends in special education indicate that parent education has become identified as a responsibility of those agencies that are involved in training handicapped children. The assumption is that many behaviors should be shaped in the home environment where the parent functions as teacher of the child. A criterion for success in any teaching situation is based upon the skillful application of certain basic principles of reinforcement theory. A program providing parents with a repertoire of skills designed to improve the parent-child relationship would serve as a prerequisite for future parent intervention with a direct instructional nature.

Objectives and Evaluation Plan:

1. *To develop consistent management procedures concurrently in school and home environments.*

Baseline data were obtained by observation of teachers' performance and parents' performance. Subsequent data were maintained by computing a rate of reinforcing behavior and command/questioning behavior. Observations were made in the home when project was terminated to determine if behavior changes are generalized to the home environment. (Baseline data were also taken in the home after project was in the third month of operation.)

A. Pre-post observation in the home:

A pre and post measurement was made in the home as a means of determining if the mother was issuing fewer commands, repeating the command once, and whether the child was responding and, if so, whether the compliant response was rewarded. An ideal ratio between these three behaviors would be one to one.

B. Data collected during sessions held in school.

1. Baseline – Part I. (a) Reward, (b) Describe, (c) Question, (d) Command (rate per min.).
2. Baseline – Part II. (a) Command, (b) Compliance, (c) Reward (ratio).
3. Continuous measurement.
    a. Part I. Two samples per session of reward, describe, question and command (rate per min.).
    b. Part II. One sample per session of command, compliance and reward (ratio).
    c. Parent Questionaire.
    Pre-post evaluation made by parent (subjective comments made by parents).

C. Measuring teacher performance.

1. Baseline data.
   A sample of the same behavior tallied in Phase I of parent program (rate for 20 min.). (Samples were taken during spontaneous non-structured play periods.)
2. Continuous data.
   Probes were made throughout the course of the school year.

D. Measurement of reliability.

Two observers tallied behaviors in all parent training sessions. Random samples of tallies were selected for statistical analysis as a means of determining their correlation.

E. Criteria for determining successful completion of program.

1. The parent completed Phase I and II of program or terminated at the discretion of the parent trainer.
2. Data collected during individual training sessions (Part I) measured the acceleration of reinforcing behavior and extinction of command/question behavior.
3. Data collected in training sessions (Part II) measured a one-to-one or two-to-one ratio between commands/compliance and one-to-one between compliance/rewards.
4. Data collected in the home measured generalization of the behaviors that were shaped in the simulated sessions. The comparison of commands, compliance and rewards was utilized as a measurement of generalization. The rationale for collecting comparative data as evidence of generalization was based on the premise that if the skills taught in Phase I and II of the project were maintained in the home the ratio between mother's cues, the child's appropriate responses and the mother's reinforcing behavior would be close to equal. Many parents were not taken through Phase II but if behaviors taught in Phase I were practiced, this ratio should still be evenly distributed.

2. To train teachers to assume roles as parent trainers.

Teachers were trained to assume roles of parent trainers and become involved in the parent training aspect of the project.

Those parents who participated in the project were pinpointed so that data could be examined to determine the effect of training received. In addition, all parents who failed to complete the program were cited, indicating which teacher was involved with them and stating, if the information was available, the reason for dropping the program.

3. To evaluate a clinically oriented parent training model in a school setting.

All difficulties and weaknesses, along with outstanding features of the program, were documented.

Methodology:

This program was based upon principles of behavior modification and while many parent training programs for handicapped children embrace the basic constructs of these principles (Patterson, Becker, etc.) there were certain specific features of the project design that were identified and examined in light of their uniqueness. As stated previously, the program was initially intended to be incorporated in a clinical setting by professional personnel. An effort was made not to undermine the basic integrity of the model so that a final analysis of accumulated data could provide information concerned with the functioning of this type of a structure in a school setting.

The training of staff participating in the project occurred at two specific points in the course of the program. Initially, a teacher with previous training in counseling was selected to become the parent trainer. A major portion of her training was provided through observation of training sessions conducted by Dr. Constance Hanf at the University of Oregon Medical School. A consultant, who had previously been trained by Dr. Hanf, later assumed responsibilities for training other teachers who each took one or more parents through the program. An emphasis in training the staff was based upon teaching nondirective counseling methods which emphasized certain basic principles of reinforcement therapy. That is, teachers needed to learn to respond to the parents' appropriate behavior and ignore behaviors that were inappropriate. These techniques not only served to enhance the level of communication between parent and teacher, but provided the model which, hopefully, the parent learned to imitate when interacting with the child.

A secondary or generalized benefit that was provided through staff in-service training was measured in the classroom. Teachers were instructed to use the same management principles in handling behaviors that were specified in the parent program. It later became imperative to train aides and volunteers to also utilize the techniques.

Several parents were taken through training previous to application for funding. These first parent training sessions were designed for several purposes. They served to provide training sessions for the Aloha Staff as a means of orientating them to the theoretical basis of the program. The evaluative plan for the project had, at this point, not been finalized. Consequently, data collected were very primary in nature with little concern for consistent pre- and posttest procedures. Simple tallies of the four behaviors designed as part of the Child's Game were compiled during each session and no formal reliability checks were made of the frequency counts taken. Pre and post samples of the ratio of commands and compliance had not been considered criteria for measurement of change occurring in the basic response patterns between the parent and child. No provision was made at this time to measure generalization in the home environment. As the program progressed attention was constantly drawn to criteria for evaluation as a means of providing an objective basis for a critical analysis of the project in a school setting.

Phase I – Child's Game. The program has been divided into two phases. Phase I was designed to train parents to utilize simple principles of positive reinforcement. The child's self-directive behaviors were accelerated by training the parent to extinguish commands and questions which are behaviors that tend to be directive in nature. As these two behaviors were extinguished, incompatible behaviors were shaped and reinforced. These behaviors were "reward" and "describe." "Rewards" were identified as praise, physical interaction, etc. "Describe" included verbal attention to the child's movement.

Four behaviors were counted while mother and child interacted in simulated play situations. It is important to note that two observers tallied behaviors. This procedure was designed as a reliability check. Arrangements were usually made so that parents came to sessions twice a week for about four weeks. Parents were scheduled for one hour but the trainer later varied schedules so that sessions were shorter as the program transpired.

Phase II – Parent's Game. Sessions continue until a criteria of no questions and no commands and two to three positive interactions per minute have been realized. At this point a parent may enter Phase II of the program. Phase II is not appropriate in all situations. This is the directive phase of the program in which parents are trained to utilize verbal cues in a consistent manner. The trainer investigates situations that occur in the home environment that call for compliance. This might be a time when the mother asks the child to do something in the self-help area. She has previously learned to extinguish commands and questions; now she is trained to use as few cues as possible, to cut down on the length of her cues and to deliver them when the child is attending. Stress is placed on designing commands that are within his comprehension and physical ability level.

A simple sequence for cueing is taught to the mother which is presented as a script. Certain consequences are designed as subsequent events that occur if the child is noncompliant.

TELL

1. Pick out one behavior to cue.
2. Tell once – be sure the child is attending.
3. Wait for the child's response.

WARN

4. If the child does not comply – use an "if-then" statement which includes the consequence for noncompliance.
5. Wait for the child to respond.

CONSEQUENCE

6. Tell the child why you are delivering the consequence using "You didn't" (time out in a chair is used during the training session).
7. Take the child back to the task.
8. Use the same cueing sequence.

REWARD

9. If compliance occurs after the first or second cue it is rewarded by praise which includes a verbal description of the child's behavior.

Phase II is based upon the premise that after compliance has been conditioned it will generalize to other situations. The mother is always trained to use the same verbal cues so that IF will become an SD for compliance. Teachers working with children in the classroom also utilized the IF as an SD for compliance. (Note: The use of aversive consequences in managing behavior is not philosophically acceptable to a broad cross section of parents and educators. For this reason precautions were taken to use this procedure only at the request of the parent.)

Baseline and final observations are conducted in the home where parent and child are observed in a spontaneous situation. These pre and post evaluations measure the mother's rate of commands and rewards before training begins and after it is terminated. At this time the child's responses to the mother's cues are also tallied. This procedure was designed after the project was initiated in September. The length of time that lapsed between the final training session and follow-up observation was not predetermined. In some cases follow-up observations were made two months after training had been terminated.

Results:

1. To develop consistent management procedures concurrently in school and home environments.

Evaluation of the first objective dealt with the content of the training sessions and included (a) measurement of any specific behavior change during the training session, (b) measurement of generalization outside of the training session, (c) measurement of parent attitude change occurring as a result of changed behavior, (d) information concerned with percentages of parents completing program, (e) random reliability checks on data collected during training sessions, and (f) record of the teacher's responses in the classroom.

(a) Measurement of behavior change during training sessions:

Pre and post data compiled from individual training sessions have been entered on Table I (Comparing Samples of Data From Simulated Situations at School). Reward rates increased in all but two of the twenty-four cases (16 and 2). Parents 16 and 2 dropped the program before completion. Rates of verbal description also increased with two exceptions, parents 6 and 15; parent 15 dropped out after five sessions of training. Command rates dropped in most of the individual cases except parents 11, 17 and 20. Seven parents (2, 5, 6, 7, 9, 23, and 24) dropped out of the program but five of these showed a decrease in question rate. Question rate decreased for all parents except 5 and 24. Some behavior changes occurred regardless of unsuccessful termination. The first parent listed as 1 on the table received some basic instruction in a group meeting held at the school before the project was funded. We worked with her again early in September; at this time the rate of commands and questions was low (.8 per min.) and the reward rate was high (5.2). She reported that she had been practicing the techniques during the summer and was pleased with the results.

The data collected during the course of the project substantiate the fact that most parents respond to their

Table I

Comparing Baseline and Terminating Samples of Data From Simulated Situations at School

	Phase I Frequency (Rate Per Min.)								Phase II Comparative			
Parent	Baseline Rate Reward	Final Rate Reward	Base Rate Describe	Final Rate Describe	Base Rate Command	Final Rate Command	Base Rate Question	Final Rate Question	Base Ratio Comm/Comp.	Final Ration Comm/Comp.	Base Ratio Com/Re	Final Ratio Com/Re
1	4.0		1.2		0.4		0.4					
2	1.8	1.8	0	4.2	2.4	0.4	2.0	0.8				
3	1.4	1.6	0	4.0	2.8	0	9.6	0	11:7	29:24	11:0	29:0
4	2.4	10.0	0	21.0	3.0	0	7.0	3.0	27:12	28:16	12:6	16:15
5	0.2	1.0	0.4	1.6	2.2	0.6	2.2	4.2				
6		1.2	1.4	1.2	1.2	0	1.2	0.4				
7	0.6	3.0	0.6	3.0	2.4	2.0	1.6	0.5				
8	2.0	2.8	0.4	3.2	4.4	0	5.0	0	5:2	1:1	5:2	1:2
9	1.0	2.2	1.0	1.6	4.2	0.2	4.0	0				
10	0	0.6	0	3.2	1.0	0.2	0.6	0	4:1		4:0	
11	0.2	1.0	0	0.6	0.6	0.6	4.8	0.2	13:12		13:5	
12	0.4	2.0	0.2	2.8	0.6	0	2.0	0	5:5	20:20	5:8	20:16
13	0.6	2.4	1.4	3.2	0.4	0.2	1.8	0	38:7	24:13	38:8	24:13
14	0.6	1.2	0.6	3.0	1.2	0.2	4.8	0	21:10	29:4	21:2	29:1
15	0.2	4.2	0	0	4.2	1.0	1.0	0.6	22:14		22:8	
16	2.0	0.4	0.8	1.0	0.2	0.8	0.6	0.2	29:13		29:5	
17	1.4	2.0	1.0	3.4	3.0	0	4.2	0.6	44:14		14:12	
18	1.4	2.0	0.8	7.4	1.4	0.4	7.4	0.2	47:26		26:3	
19	0.4	3.8	1.2	3.2	1.0	0	3.8	0.2	21:12		12:0	
20	1.6	1.8	2.2	2.8	0.6	0.6	2.0	0.2	14:10		10:2	
21	0.6	0.8	0	3.2	2.2	0	1.6	1.0	20:8	8:3		
22	0		3.3		2.0		5.0		28:8		8:5	
23	2.2	5.4	1.2	2.0	5.0	0	5.2	0				
24	1.2	1.4	0	0.2	12.0	1.0	0.4	0.6				

retarded children with very high rates of commands and questions and low rates of contingent reinforcement. These data support the premise that the propriety of bringing parents into teaching situations with the child before these behaviors have been changed should be questioned. Many recommended parent training models provide general instruction in the theory of contingent reinforcement but do not structure training which would result in specific behavior changes on behalf of the parent.

The high rates of commands and questions recorded in the baseline sessions indicate that parents are usually overly directive when interacting with their child. For instance, the simulated play situation was not designed as a teaching session but many parents used it as such. Continuous teaching was observed during the play sessions. Statements such as, "What color is this?" and "Watch Mommy," were recorded on the tally sheets by observers. This was a significant pattern in that it was observed in a majority of the sessions.

Five of the six parents participating in Phase II (Table I) of the training program made gains in getting compliance to commands. Four of the six parents in Phase II demonstrated an increase in the ratio of rewards per compliance but two parents (3 and 14) rarely gave rewards. Many times it became very difficult to simulate noncompliance in the school situation. The training procedure available at school involves taking a child from a time out area back to a task that is only symbolic of a real situation that might occur in the home. One of the teachers, using this program, found that he could not simulate noncompliance at school, so he went to the home where the problem actually occurred. He dealt with the problem of hanging up a coat successfully, but the parent still had difficulty generalizing the technique used in this situation to others that occurred during the day.

The behavior samples collected in the home (Table II) were designed as a measure of generalization. The ratio of commands, questions and rewards was selected as criteria for determining whether the behaviors in Phase I of the program were maintained outside of training. Baseline samples were not recorded in the home until the eleventh parent came into training. This procedure was implemented as a means of determining whether rates of behavior would change when measured in the school situation.

It was determined that rates of behavior were usually lower in the home versus school. Parents could be more anxious about performance in the school, which would account for higher rates of verbal behavior. According to the data, parent 20 was interacting with the child effectively before training. The ratio 3:2 command/compliance,

Table II

Comparing Baseline and Final Observation Data From Observations Conducted in the Home*

	Comparative				Frequency			
Parent	Baseline Ratio Comm/Comp	Final Ratio Comm/Comp	Baseline Ratio Comp/Reward	Final Ratio Comp/Reward	Baseline Rate Comm/Quest	Final Rate Comm/Quest	Baseline Rate Reward	Final Rate Reward
1	—	—	—	—	—	—	—	—
2	—	—	—	—	—	—	—	—
3	—	12:2	—	2:0	—	2.4	—	0
4	—	12:6	—	6:1	—	2.4	—	0.2
5	—	—	—	—	—	—	—	—
6	—	1:1	—	1:3	—	0.2	—	1.8
7	—	—	—	—	—	—	—	—
8	—	9:1	—	1:2	—	1.8	—	—
9	—	1:1	—	1:6	—	0.2	—	1.4
10	—	—	—	—	—	—	—	—
11	9:2	—	2.1	—	1.2	—	1.4	—
12	10:2	6:1	2:5	1:0	3.8	1.2	1.8	0
13	—	2:1	—	1:0	—	0.4	—	0
14	12:2	5:5	2:2	5:1	2.6	1.0	1.0	0.2
15	—	—	—	—	—	—	—	—
16	8:1	—	1:0	—	2.6	—	0	—
17	15:1	14:8	0:0	8:3	3.0	2.8	0	0.6
18	30:10	14:13	10:1	13:5	6.0	2.8	0.2	1.0
19	25:7	—	7:1	—	5.0	—	0.2	—
20	3:2	—	2:1	—	1.4	—	0.2	—
21	7:3	—	3:1	—	1.4	—	0.2	—
22	8:0	—	0:0	—	1.0	—	0	—
23	34:3	—	3:4	—	7.8	—	0.8	—
24	27:3	—	3:5	—	—	—	—	—

*Home observation procedure was not initiated when the project initially began. Consequently the first parents in training were not included in this evaluation.

2:1 compliance/reward at home can be compared with a 14:10 command/compliance ratio at school and 10:2 reward rate. This parent dropped out of the project after the first session, stating she had no problems. We agreed with her and felt, at this point, she would not need training.

In several instances final observations were not scheduled. In the process of collecting baseline data in the home it could be noticed that parents clearly resented the intrusion or felt uncomfortable about observations in the home. Also, those parents dropping out of the program were not followed. An on-going concern for staff, in working with the child in an educational setting, is parent alienation. The final observations to be conducted in the home were not scheduled if the parent seemed apprehensive.

Generalization and its measurement poses a complicated problem in any teaching situation. Will generalization ever occur without reinforcement of the behavior in other situations? If patterns of interaction and other variables don't change in the home, then new behaviors will not be maintained. It is interesting to note that some generalization occurred in the command/question areas of behavior. For example: Parent 3 elicited 9.6 questions per minute during the baseline session. This rate dropped to 2.4 per minute when an observation was made in the home after training was terminated. Parent 18 had a base rate of 7.4 questions which dropped 2.8 in the final sample.

Attitude change was recorded on the questionnaire completed during the initial interview and after the final session. This questionnaire was designed to provide a point of departure for the parent in the interview session. The items on Table III showing a higher percentage of change

Table III

Parent Questionnaire
Summary of Pre- and Posttest Items*

Not a Problem   Is a Problem   Explain

Are you concerned about the way your child interacts with other children?

1. Playing	1% of items changed to positive column.
2. Hitting	60% of items changed to positive.
3. Bossing	1% +
4. Shyness	1% +
5. Anything else	

Are you concerned about the way your child interacts with you in:

1. Minding	50% positive
2. Attention Getting	1% –
3. Playing with you	1% positive
4. Listening	x no change
5. Leaving you alone	1% +
6. Anything else	

Are you concerned about your child's personal habits?

1. Temper tantrums	33% +
2. Attention span	33% +
3. Frustation level	33% +
4. Sleeping habits	x
5. Bed wetting	33% +
6. Nervous habits	1% +
7. Responsibility	1% +
8. Nail biting	1% +
9. Thumb sucking	x no change
10. Dressing	50% positive
11. Cleanliness	x no change
12. Independence	x no change
13. Doing chores	x no change
14. Handling toys	x no change
15. Eating	1% + positive
16. Anything else	

Key: + = Positive
- = Negative
x = No change

*Summary was compiled from 6 of the pre- and posttest questionnaires. Parents not completing program were not posttested.

from the negative to the positive were minding, dressing and hitting. It would be difficult to determine what specifically would account for these attitude changes. However, one could project that when the parent is trained to become less directive independent behavior accelerates, which could account for improvement in dressing. The minding item correlates with the underlying principles of the program in that final criteria is based upon obtaining compliance. A decrease in aggressive behaviors such as hitting could be indirectly influenced by the parents' ability to ignore inappropriate behavior.

The record of teacher responses in the classroom (Table IV) was collected as a means of determining whether teachers were eliciting the specific behaviors used in the parent training sessions. Baseline data recorded in the classrooms showed that teachers were not using command/question behaviors outside of direct teaching situations. The teachers became interested in the principles of the program during the pilot phase of the project. At this time, plans were made to structure spontaneous play situations during the course of the day so that teachers could practice the same skills that would be taught to parents. Aides and volunteers were also trained to use these techniques. The daily practice periods offered teachers an opportunity to internalize the behaviors so that they generalized throughout the course of the day. Behaviors in the classroom were not always recorded during these play periods. Many samples were taken during lunch, etc.

2. To train teachers to assume roles as parent trainers.

Teachers also functioned as parent trainers. During the course of the year each teacher took a parent through the project. The teachers were keyed and information concerning the status of the parent when terminated was recorded on Table V (Parents Participating). It is difficult to determine whether teachers were any more or less adequate when functioning as trainers. They were equally as successful in changing behavior in Phase I as the parent trainer. The staff were, however, exhausted by the end of the school day and found it difficult to manage parent training when it was superimposed upon teaching obligations.

The Training Kit, adapted from Dr. Hanf's behavior modification material, was designed specifically for teachers. It was detailed in a sequenced fashion with all the steps preprogrammed. The simplistic design incorporated in this training package seemed to aid the teachers in becoming successful trainers.

3. To evaluate a clinically oriented parent training model in a school setting.

The basic philosophy of the program as outlined in the initial application stresses the use of nondirective techniques when counseling parents. Negative behaviors are usually ignored, while positive behaviors are reinforced. These techniques were successful in some situations but proved not to be appropriate in others. The length of time

Table IV

Data Concerned with Teacher Behaviors
in the Classroom in Rate Per Minute

Teacher	Baseline Rate-reward	Final Reward	Base Describe	Final Describe	Base Command	Final Command	Base Question	Final Question
1	.05	.60	.50	1.50	1.35	.40	.00	.00
2	.05	.20	.30	.80	.10	.00	.00	.00
3*	.03	.17	1.15	.75	.10	.15	.05	.00
4*	.50	.10	.65	.60	.50	.00	.60	.00
5	.40	2.00	.20	.40	.85	.60	.40	.20
6	.35	.40	.45	2.80	.60	.20	.70	.80
7*	.45	.25	1.50	.75	.50	.10	.20	.00

*Teachers involved in parent training pilot programs

invested in one parent many times became disproportionate. Using extinction as a shaping technique is always a long range process. As an example, parent 3 was in training for three months. The time invested in extinguishing this parent's inappropriate behavior seemed unrealistic in that school personnel have only a few hours a day available for this type of intervention. In this case the follow-up visit in the home revealed that, despite the length of training, command behaviors were not maintained on extinction. Sessions could have been shortened if more directive techniques such as cueing the parent could have been implemented. Parent 24 was brought through Phase I with the aid of a device that allowed the parent trainer to cue the parent from another room. This parent could not listen to verbal instruction or attend to role playing and modeling. The high rate of command/question behavior (12 per minute) in the baseline sample measured the intensity of the problem when the training was initiated. The drop from 16 commands per minute to 0.2 per minute in one session could not have been accomplished without direct confrontation, which is a form of aversive control.

While it is true that direct intervention of a confronting nature is sometimes a necessary alternative, only a highly skilled counselor would have the experience for this type of an approach. Many parents can be extremely threatened when exposed to more directive counseling approaches. The nondirective method provides for additional incentive in that the parent would be part of a group. The individual training model could then be included as a departure from the group training procedure which would be made available to some of the parents.

Certain assumptions can be formulated as to the feasibility of incorporating this type of a model in a school program. It became evident early in the year that parents were not as interested in participating in training programs as had been anticipated. It soon became necessary to draft parents versus serving them at their request. The original program was designed to help parents with extreme management problems.

Consequently, changes could be made in the structure of the program that would allow for the needs of many parents who manage their child with some degree of success. One suggestion would be to schedule small group sessions for purposes of imparting basic theoretical information to parents. Parents could practice the skills at home, come back to the meeting and report results to the group. This type of a model would be less demanding and is slower; but much more appropriate for teachers that have minimal counseling skills in their repertoire. A small percentage of teachers working in the field would have the finesse required to effectively counsel parents with severe emotional problems. A programmed manual, in-service training or classroom experience cannot hatch a highly qualified parent trainer.

In conclusion, a few remarks were requested by the third party evaluator concerning the parents who would drop out during the course of the project. It seemed that certain misconceptions concerning the role of the teacher tended to interfere with the ability of the child's teacher to work effectively with parents. Many parents respect the teacher and view her as a qualified professional who is equipped to make suggestions about the function of the child in the home. There are, however, other norms that can be identified among the parent population. Many parents view the teacher as a person that provides for the needs of the child in an environment that is secondary in nature. The mother views herself as the prime mover in the child's life and resents any inferences that would be made concerning her ability to mother. Many times this is a woman who has successfully raised several children. Records of interviews and discussions with mothers reveal that in several situations mothers who dropped out of training early in the program made references to the number of children they had previously raised. It is also interesting to note that

Table V

Parents Participating
(In Order of the Date Training was Initiated)

Parents by Number	Date Training Was Initiated	Identification of Trainer	Status When Terminated
1	9/22	P.T.	Completed Phase I
2	9/22	P.T.	Dropped 1st session
3 (Mrs.)	9/30	P.T.	Completed Phase I-II
4 (Mr.)	9/30	P.T.	Completed Phase I-II
5	11/23	P.T.	Dropped
6 (Mrs.)	12/2	T^1	Completed Phase I
7	12/2	T^1	Completed Phase I-II
8	12/6	T^2	Completed Phase I-II
9	12/9	P.T.	Completed Phase I-II
10	1/10	T^1	Completed Phase I-II
11	1/11	T^3	Dropped
12 (Mr.)	1/13	P.T.	Completed Phase I-II
13 (Mrs.)	1/13	T^2	Completed Phase I-II
14	1/31	P.T.	Completed Phase I-II
15	2/3	T^4	Dropped 5th Session
16	2/8	P.T.	Dropped 3rd session
17	2/12	P.T.	Completed Phase I-II
18	3/1	P.T.	Completed Phase I
19	3/7	P.T.	Completed Phase I
20	4/10	P.T.	Dropped 1st session
21	4/24	P.T.	Completed Phase I
22	5/1	P.T.	Dropped 1st session
23	5/25	P.T.	Completed Phase I
24	4/26	P.T.	Completed Phase I

Key: P.T.	Parent Trainer (teacher trained specifically to manage the program. Counseling background in addition to work with Constance Hanf at C.C.D.).
T^1	Teacher receiving training during pilot phase of project – worked with the Parent Trainer.
T^2	Some previous work in pilot phase of project, also participated in in-service training.
T^3 T^4	Classroom teachers participating in in-service training provided by Consultant.

many times a mother would come to the first session glowing with anticipation. However, when the focus of the program was placed upon the behavior of the parent versus the child, following appointments would be missed. Usual excuses were sick children, repair men, Christmas plans, etc.

A great deal of consideration should be given to the problems that surfaced during the course of this project. Bringing a parent through an intensive training program is a long and painful process demanding dedication and perseverance on behalf of all parties involved.

Third Party Evaluator's Comments:

This is an excellent example of a well documented program. The initial objectives were clearly stated and evaluation procedures were conducted at every step of the project.

Since this project was dealing with training and behavior modification, with behavior problems it became even more important to document very carefully each activity and benefit from its outcome. These types of projects are frequently open to criticism because of the somewhat unorthodox method of treatment. This project has adequately accepted that challenge and can sufficiently defend its position on all treatment procedures that were used.

The results in nearly every case are very impressive and indicate that parents can be trained to become very efficient modifiers of behavior and be an enormous help to the school personnel. Although the data collection systems were quite burdensome at first, the staff later became dependent on these data for increasing their communication with parents and making decisions about the children and their programs.

The information reported in this report is only a small sample of the total amount of information available through the project director. For example, continuous data on training sessions were collected; there are more data available concerning the parents and their participation in programs and there is information available concerning the inter-rater reliability on observation. (The correlation was 80.)

A training kit was also developed which could be adapted to other similar settings and can be obtained by contacting the project director. Many of the observation techniques that were used were quite unique in nature and would also seem to have application to other similar programs. The project was successful in devising a procedure for evaluating the effectiveness of parent-child interactions in terms of the use of behavior modification principles.

There were several parents that did not complete Phase I of the program and most of those that did complete did not go into Phase II. This is very unfortunate, but it does raise some questions as to the advisability of beginning this type of program without taking into consideration the points that the project director makes under objective 3. Other methods of presenting the material and strategies for maintaining parent participation should be examined.

In general, the project should be considered as having met most of its objectives and provides some very valuable information on parent-child interactions.

Title of Project:	*Junior Work Study Program for Junior High Aged Boys*
Location:	*Bend, Oregon*
Type and Number of Children Served:	*13 emotionally disturbed*
Funding Allocated:	*$17,000*
Project Beginning Date:	*August 31, 1971*
Project Ending Date:	*June 6, 1972*

Background and Rationale:

This program is an extension of a project that was funded during the 1970-71 academic school year under a Title VI grant. The purpose of the project, at that time, was to utilize vocational type activities as motivation for teaching basic academic skills to boys between the ages of 12–17 who were of normal intelligence but appeared to lack motivation or ability to profit from the regular school curriculum. The program was basically a work study type program where the boys were introduced to vocational-like activities in which they could learn not only the vocational skills needed in the task but also could learn basic academic skills such as reading, arithmetic and spelling needed to accomplish the tasks that were set for them.

This present project was based on the experiences of the previous year's program. The curriculum that was designed during the previous year was used during this present project. Basically, then, the purpose of this project was to employ vocational type activities as motivation for teaching basic academic skills to junior high school boys who were experiencing difficulty in the regular school environment.

Objectives and Evaluation Plan:

1. ***To improve the academic achievement of the boys in the program.***

   To evaluate this objective, the Wide Range Achievement Test (WRAT) was administered on a pre- posttest basis.

2. ***To develop vocational awareness for the boys in the program for possible future participation in distributive education.***

   To evaluate this objective, a teacher devised vocational awareness test was to be administered on a pre-posttest basis.

3. ***To develop social skills of the boys through behavior modification techniques and other less structured procedures.***

   To evaluate this objective, the Walker Behavior Problems Checklist was administered on a pre- posttest basis. In addition, school attendance records were reported, as well as reports on delinquent types of behavior exhibited by the boys. School attendance records and delinquent behaviors were to be compared with the boy's records from the previous school year.

4. ***To apply curriculum recommendations developed out of this year's experience.***

   To evaluate this objective, the description of the curriculum was included in the project.

Methodology:

The project was initiated on August 31, 1971 and was completed on June 6, 1972. The project was designed for boys ages 12 to 17 who were referred by the junior high school counselor and selected for the project by the junior high school counselor, the director of special education and the project teacher. The boys were of normal intelligence, but were experiencing poor academic achievement in school. Also, coupled with these academic problems was the fact that these boys engaged in acting out and delinquent or predelinquent behaviors in the school setting.

The project was under the direction of a full time teacher and a half time teacher. The class operated as a self-contained unit on a daily basis. The classrooms were two adjacent rooms in an old school building in the Bend School District. The advantages of this facility were that the building was old and only partially used for other classes, so that carpentry and other noisy activities could be conducted without interferring with other classroom activities. In addition to the classroom setting, the teacher frequently met with the students in outdoor settings, especially when the students were working in Shevlin Park, a park close to the City of Bend.

A variety of vocational activities were conducted by the boys during the school year. They cut poles from a National Forest and used them in the design and construction of a playground at an elementary school in Bend. They also constructed 150 bird houses which were placed in Shevlin Park. In addition to the construction of the bird houses in the park, the boys spent a month living in the park, during which time they constructed three miles of nature trails using forest service specifications. In addition, they placed a number of signs in the park identifying the flora and fauna found in the park area.

They earned $250 on this job. They also designed and installed two bridges over Tumalo Creek in Shevlin Park. In addition, they were given the task of constructing, routing, staining, and painting a large sign for the entrance of Shevlin Park. The sign was designed to tell the history of the land acquisition and the exploration of John C. Fremont who first came into this area in 1843.

The boys in the project also cut and hauled wood to sell in the local Bend area. In this activity they learned to use a number of different pieces of equipment and material found in the lumber industry. The boys also were involved in a landscaping project for a local apartment house complex.

Other activities included building canoes, painting classrooms in the building in which the boys had their classroom and planning a barbeque for the community of Bend. This barbeque was attended by 275 people.

In addition to doing the academic work that was related to the various work activities, the students used math workbooks and language workbooks as part of their academic training. The boys also met the requirements to become an Explorer Post in the Boy Scouts of America. In May, 1972 the boys won the Hornaday Award for exceptional and unusual work in conservation as a result of their project work at Shevlin Park. In addition, they were also presented with the Historic Trails Award for fulfilling the necessary requirements for an Explorer Post, again for their work in Shevlin Park.

During the course of the year's project, the boys were able to earn Doubloons as reinforcers for engaging in appropriate conduct and responsible behavior. These Doubloons were used by the boys to purchase appropriate items such as shoes, clothes, watches, radios and other materials that they needed. Thus, in addition to the reinforcement of their work activities the boys also received these added reinforcers for exhibiting appropriate behavior and reaching the goals set by the project teacher.

Results:

1. ***To improve the academic achievement of the boys in the program.***

Table I presents the pre- and posttest measures for the boys tested with the WRAT Test. As can be noted on Table I only six of the participating boys had pre- posttests in the areas of reading, spelling and arithmetic. For the boys who were tested, the pattern of results suggests a great deal of inconsistency, with some boys gaining a few months, some more than a year, while others showed a minus growth pattern.

2. ***To develop vocational awareness for the boys in the program for possible future participation in distributive education.***

To evaluate this objective, a teacher-made test was to be administered to the students. However, it was reported by the instructor that because of the wide range of activities in which the boys participated, it was inevitable that they come in contact with many types of work activities and work situations from which vocational awareness could be developed.

3. ***To develop social skills of the boys through behavior modification techniques and other less structured procedures.***

This objective was to be measured through the use of the Walker Problem Behavior Identification Checklist, records of attendance and a description of each boy's behavioral problems and growth. Table II presents the scores of those students who were given the Walker Problem Behavior Identification Checklist on a pre- posttest basis and Table III presents the record of attendance for the boys in the program. In examining the scores on the Walker Problem Behavior Identification Checklist it should be noted that a total score of 21 or higher is indicative that the student may be experiencing behavior problems in the classroom to such a degree that he could be identified as a behavioral problem. As can be noted on the posttest total scores, six of the ten students had scores of 21 or higher. It should be noted that these six students also had scores of 21 or higher on the pretest and that their total scores actually increased during the year. An increase in score indicates that the child is experiencing more behavioral problems as identified by the teacher. This increase in scores is especially noticeable on the subtest *Acting Out*. It can be seen that the six students whose total posttest scores increased also had their scores increase on the *Acting Out* subtest, which indicates that the teacher felt that they were exhibiting more acting out behaviors at the end of the project than they did at the beginning.

Table I

WRAT Results

Grade Equivalent Scores

Subject	Reading			Spelling			Arithmetic		
	Pre	Post	Diff.	Pre	Post	Diff.	Pre	Post	Diff.
C.B.	2.3	2.4	+.1	2.0	2.6	+.6	3.6	5.2	+1.6
G.F.	10.5	10.9	+.4	6.3	6.5	+.2	5.3	6.5	+1.2
M.J.	13.5	15.8	+2.3	9.3	9.7	+.4	9.2	8.2	+1.0
J.P.	12.1	12.9	+.8	13.8	11.5	-2.3	5.7	5.9	+.2
R.R.	3.9	3.8	-.1	2.6	2.5	-.1	4.7	5.2	+.5
J.W.	2.1	2.3	+.2	2.0	1.7	+.3	3.6	4.2	+.6

The following students were administered the pretest only:

M.R.	6.3	4.7	5.9
J.S.	8.4	6.0	5.7
R.L.	5.7	3.7	5.0
R.B.	3.9	3.7	5.0
P L.	5.5	3.7	4.5
R.P.	6.1	4.5	4.5
M.B.	10.5	6.5	5.0

Table II

Walker Problem Behavior Identification Checklist

Pre- Posttest Scores
(Only those Students with Pre- Posttest Scores were Reported)

Student	Acting Out		Withdrawal		Distract		Distorted Peer Relations		Immaturity		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
R.B.	19	22	0	0	7	9	4	5	1	1	31	37
C.B.	12	6	1	0	7	4	0	0	1	0	21	10
G.F.	22	23	4	4	8	11	9	13	0	4	43	55
M.J.	7	0	0	0	5	1	0	0	3	0	15	1
R.L.	8	22	5	0	10	8	4	11	1	3	28	44
P.L	2	3	1	0	3	1	2	4	2	2	10	10
R.P.	21	24	6	10	10	12	9	9	9	10	55	65
J.P.	15	8	0	0	7	8	6	1	3	3	31	20
R.R.	14	18	0	0	9	9	6	7	3	1	32	35
J.W.	17	22	0	0	9	9	6	5	0	1	32	37

Table III presents the records of attendance for each boy, and it can be noted that the average days absent were eight days. This can be compared with the average days absent for the boys in the program last year, which were two days per boy. This indicates that the rate increased four times as compared to the rate for the previous year. The behavioral descriptions that were to be submitted for each boy were not included in the final report of this project.

4. ***To apply curriculum recommendations developed out of this year's experience.***

A list of curriculum suggestions were provided, along with the changes that the teachers and administrators felt were necessary for the program. This included the concept of enrolling boys in the project who were less negative and who had fewer delinquent behaviors than boys previously enrolled. It was felt by the district that they would like to balance the class, with approximately half of the boys being of the typical delinquent type, such as they had been serving, and the other half being of a less delinquent type. It was also recommended that the program set up stricter rules for attendance in class.

Table III

Record of Attendance

Student	Days Absent	% Absent	Days Present	% Present
R.B.	1.0	1.5	77.0	98.5
C.B.	8.5	13.0	159.5	87.0
M.B.	.5	9.0	49.5	91.0
G.F.	2.0	2.5	166.0	97.5
M.J.	5.5	8.0	49.5	92.0
R.L.	16.5	34.0	132.5	66.0
P.L.	13.0	28.0	101.0	72.0
R.P.	4.5	5.0	97.5	95.0
J.P.	7.5	11.0	62.5	89.0
R.R.	8.0	12.0	160.0	88.0
M.R.	11.0	11.0	97.0	89.0
J.S.	16.0	34.0	31.0	66.0
J.W.	15.0	22.0	153.0	78.0

Average Days Absent: 8 days per boy.

Third Party Evaluator's Comments:

Results of this project indicate, in many respects, that it was a success. Probably the greatest measure of success was the fact that the project has been accepted by the Bend School District as part of the regular district program. Money for the continuation of this program has been included in the 1972-73 school budget. This is probably the strongest recommendation that can be made for a program developed by a district using Title VI funds. Other honors to the project were the Hornaday Award and the fact that the boys were recognized as an Explorer Post in the Boy Scouts of America program.

There are some areas where it does appear that the project could be improved. One would be in the area of academics. As the results of the WRAT Test indicated, the academic growth was very irregular and did not show any consistency. Possibly the academic program could be strengthened through the use of programmed materials in both reading and math. The boys could use the programmed materials on an individual basis when they were not directly involved with vocational tasks. They could be given assignments in materials such as Sullivan Programmed Readers and BRL Programmed Math that could be completed between vocational tasks. This procedure might allow more academic activities to the program.

The behavior of the students also needs improvement. This was indicated by the Walker Behavior Problem Identification Checklist, where six of the ten boys increased their total scores, which is an indication that they are being identified as having more problem behaviors than they initially had at the beginning of the program. As also indicated earlier, the subtest *Acting Out* showed the most increase for these six boys. Possibly, the use of a more highly structured behavior modification program might help. Participation in vocational activities could be made contingent upon the exhibition of appropriate behaviors. This procedure might prove feasible if the vocational activities were truly reinforcing. As indicated, the district personnel also noted the increase in problem behaviors and they were attempting to alleviate this by including fewer boys with negative behaviors and including more boys who could possibly provide a model for more acceptable classroom behaviors. It is conceivable that the inclusion of this type of boy, plus a more structured behavioral approach, could decrease the amount of acting out behaviors exhibited by the total group.

Title of Project:	*Early Identification and Re-Integration of Learning Disabilities at the First Grade Level in Central Point District 6.*
Location:	*Central Point, Oregon*
Type and Number of Children Served:	*36 Learning Disabilities*
Funding Allocated:	*$19,900*
Project Beginning Date:	*August 16, 1971*
Project Ending Date:	*June 2, 1972*

Background and Rationale:

Testing of first graders at Central Point School District in the fall of 1970 revealed approximately 40% of the District's first graders scoring "D" or "E" on readiness tests. This figure has been increased from 25% three years previously, indicating an increasing number of potential school failures entering the first grade. This program was therefore designed to supply instruction and provide for development of skill in visual perception, in visual-motor coordination, auditory perception and language.

Objectives and Evaluation Plan:

1. To provide reading readiness skills for the project children so that a minimum of 90% of the group will score "C" level or higher on the Metropolitan Reading Readiness Test that will be administered in December, 1971.

To evaluate this objective the Metropolitan Reading Readiness Test was administered at the beginning of the project. Only those children scoring at the "D" or "E" level were accepted into the project. This test was to be re-administered in December, 1971 to measure the above objectives. A different form of the test was to be administered in December.

2. To provide first grade reading instruction so that each participant will be able to read at a minimum of 1.5 grade level as measured by the Metropolitan Reading Test – Primary I Battery, which will be administered at the end of the first grade year.

To evaluate this objective, the Metropolitan Reading Test – Primary I Battery will be administered to all of the children in the project at the end of their first grade year.

3. To provide initial and follow-up information concerning the reading ability of the project children from the Title VI project in Central Point from 1970-71 who are now entering the second grade.

To evaluate this objective, at the beginning of the year a questionnaire will be distributed to the teachers who had these children. This questionnaire will provide information concerning the initial reading placement of the project children. At the end of their second grade year, as part of the general Title I testing program, these children will receive a reading test to measure their reading ability at this time.

(It should be noted that objective 3 is not an objective of the present Title VI project, but was included to provide information concerning the effects of last year's Title VI project.)

Methodology:

This program was conducted in two elementary schools. A one-half time fully certified teacher who had both previous experience teaching in the primary grades, and who had special training in the use of the instruments and programs, was employed for each school. This teacher worked with selected children for one full hour each morning, five days per week. The children were instructed in groups of four to five. A work station away from the regular classroom was made available for this small group work so that there were no inhibiting factors on the language development program. The gymnasium was made available on a regular basis for the students needing motor coordination development programs.

Results:

1. To provide reading readiness skills for the project children so that a minimum of 90% of the group will score at the "C" level or higher on the Metropolitan Reading Readiness Test that will be administered in December, 1971.

See Table I. An examination of Table I shows that all children who were administered the posttest scored "C" or better except two, students 21 and 22.

2. To provide first grade reading instruction so that each participant will be able to read at a minimum of 1.5 level as measured by the Metropolitan Reading

Table I

Pre and Posttest Scores
Metropolitan Reading Readiness Test

Student	Pre	Post
1	D	B
2	D	B
3	C	C
4	E	B
5	D	B
6	E	C
7	D	B
8	D	C
9	D	C
10	E	C
11	D	C
12	D	—
13	D	C
14	D	C
15	E	C
16	C	B
17	C	B
18	—	C
19	D	B
20	D	C
21	D	D
22	E	D
23	D	C
24	D	B
25	E	—
26	E	C
27	C	B
28	D	C
29	D	C
30	D	C
31	E	C
32	D	C
33	D	C
34	—	C
35	—	—
36	—	—

Table II

Results on Metropolitan Achievement Test

Student	Word Knowledge	Word Discrimination	Reading	Composite
1	1.9	2.8	1.7	2.1
2	2.5	2.4	2.1	2.3
3	1.8	2.0	1.7	1.8
4	2.7	2.1	1.9	2.2
5	2.9	2.6	2.5	2.7
6	1.8	1.9	1.7	1.8
7	1.6	1.8	1.7	1.7
8	1.9	2.0	1.6	1.8
9	1.8	2.1	1.5	1.8
10	1.9	1.6	1.8	1.8
11	1.6	1.9	1.8	1.8
12	1.8	1.8	1.7	1.8
13	1.3	1.4	1.6	1.4
14	2.5	2.5	1.6	2.2
15	1.3	1.4	1.6	1.4
16	2.9	2.8	2.2	2.6
17	2.5	2.5	1.9	2.3
18	2.0	2.6	1.6	2.1
19	2.2	2.6	2.1	2.4
20	2.9	3.1	2.7	2.9
21	3.2	2.0	1.6	2.3
22	---	---	---	---
23	1.7	1.7	1.8	1.7
24	1.9	2.6	1.9	2.1
25	1.5	1.8	1.7	1.7
26	1.9	1.7	1.7	1.7
27	2.9	2.8	2.0	2.6
28	2.7	3.1	1.9	2.6
29	2.4	2.5	1.5	2.1
30	1.9	2.1	1.7	1.9
31	1.7	1.8	1.5	1.7
32	2.0	2.4	2.1	2.2
33	1.7	1.9	1.6	1.7
34	2.9	2.5	2.8	2.7
35	1.7	1.9	1.6	1.8
36	1.8	1.7	1.6	1.7

Test – Primary I Battery, which will be administered at the end of the first grade year.

See Table II for the results on the Metropolitan Reading Test. If one examines the scores in column 3, *Reading*,one can perceive that all students achieved a score of 1.5 or above. If one looks at the fourth column, a composite between reading word discrimination and word knowledge, one can perceive that all students except two achieved scores of 1.5 or above. Students 13 and 15 scored 1.4.

3. To provide initial and follow-up information concerning the reading ability of the project children from the Title VI project in Central Point from 1970-71 who are now entering the second grade.

Table III shows the results of a teacher questionnaire which was administered at the beginning of the second grade.

No data were submitted to indicate the growth of children during the second grade as had been agreed to in

Table III

Results of Teacher Questionnaire Administered
at Beginning of Year

Student	Teacher Rating				
	Word Attack Skills	Comprehension	Reading Speed	Instructional Level	Independent Reading Level
1	average	weak	weak	Primer	Primer
2	weak	weak	weak	Primer	Low Primer
3	average	average	weak	Primer	High Primer to low First
4	average	average	average	Primer to First	First
5	weak	weak	weak	Primer	Readiness
6	weak	weak	weak	Primer	Readiness
7	weak	weak	weak	Lippicott B	Lippicott B
8	average	average	weak	Lippicott C	Lippicott C
9	very weak	weak	very weak	Lippicott B	Lippicott B
10	average	average	weak	Second	Primer
11	weak	weak	weak	Primer	Pre-Primer
12	weak	weak	weak	Primer	Pre-Primer
13	weak	weak	weak	Pre-Primer	none
14	weak	weak	weak	Pre-Primer	none
15	weak	weak	weak	1.6	1.4
16	weak	weak	weak	1.3	1.1
17	weak	weak	weak	1.6	1.3
18	average	strong	weak	2.0	1.6
19	average-weak	average-weak	average-weak	–	–
20	average-weak	average-weak	average-weak	–	–
21	weak	weak	weak	1.0	–
22	average	average	average	Lippicott B	2.0
23	average	average	weak	Lippicott B	Lippicott B
24	average	average	average	Lippicott B	2.0
25	average	weak	weak	Lippicott B	Lippicott B

the evaluation plan.

Third Party Evaluator's Comments:

During a visit to the project by the third party evaluator, he was much impressed by the caliber of the instructional staff. Both teachers were especially capable and were using Distar materials appropriately and well. Moreover, the aides are of the caliber to indicate that they could, if necessary, take charge of the classroom.

Another very positive element of this program is the capability of the teachers to successfully incorporate Distar, Sullivan and Frostig into an integrated program, demonstrating the complimentary values of these curriculum materials.

An examination of the results in Tables I and II indicate that the project achieved the first two objectives to a very fine degree. All children presently in the program improved their scores in the Metropolitan Reading Readiness Test and scored quite well on the Metropolitan Reading Achievement Test.

It should be noted, however, that even at the conclusion of this program; the lowest children will need individual programming. Thus, they could not be put into an "average" second grade but will need some individual help. According to the principal at one of the schools, he indicated "that we need more hands." He maintained that the high school aides and the cross age helpers are not adequate to do the jobs of individualizing programming in these classrooms. However, it should also be noted that these high school aides and these cross age helpers have not been systematically trained to provide that help.

This program, like so many other programs which provide individual assistance to children demonstrating reading difficulties at an early age, is able to show progress with the child during the life of the program. The true test of one of these programs, however, is the ability of the child to succeed in subsequent grades. Unfortunately, the school district did not provide data which would allow us to determine whether or not the children in last year's program were succeeding. The question might be raised as to whether or not they had such an obligation, although there was an agreement reached that these data would be furnished to advance knowledge about this type of program. It is felt by the third party evaluator that this was part of the contract of the school district in this project and was not adhered to by the school district.

A final note needs to be made about this project. During one of the visits to the project it was pointed out by the project staff to the third party evaluator that they were concerned about Distar as a useful instrument for this type of population. They particularly referred to Distar as an instrument developed for inner-city, ghetto populations and felt that it moved through the children too slowly. It is interesting to note, however, that the teachers were not maintaining individual data and therefore had difficulty pinpointing exactly at what point the child was or what he was able to accomplish. It was pointed out to them by the third party evaluator that the maintenance of individual data would perhaps allow them to move the child through the Distar program at a more appropriate pace for the child's ability.

Title of Project:	*Workshop for an Expanded Educational Life*
Location:	*Clackamas County, Oregon*
Type and Number of Children Served:	*25 emotionally handicapped*
Funding Allocated:	*$15,000*
Project Beginning Date:	*July 1, 1971*
Project Ending Date:	*June 30, 1972*

Background and Rationale:

This project was undertaken for the Clackamas County Intermediate Education District as a pilot study in the provision of special education services for emotionally disturbed youngsters committed by the juvenile courts to the county's four residential youth care centers. This program was needed to provide a remedial and academic learning situation wherein each youngster was tested to assess his educational needs and then provided with high interest instructional materials and tutoring at his existing level of achievement.

Many of the emotionally disturbed youngsters experience extreme difficulty in adjusting to conventional schools and present severe behavior problems when they do attend schools. The public schools have been unable to provide the services and conditions necessary for disturbed delinquent students: educational, social or emotional advancement. A large percentage of delinquent students were suspended or expelled from public schools during past years leaving strained relationships between the youth care centers' and schools' staffs, as well as between students and the staffs of both institutions.

The project originally suggested that approximately 16-20 students from the four youth care centers be selected for this program. Only one youth care center and none of the schools agreed to this proposition. They felt that the entire youth care center population should be included, choosing not to separate a few for different treatment.

The project finally included all residents of Youth Care Centers 1, 2 and 3 in varying degrees and did not include Youth Care Center 4, except to discuss educational goals and help them with reading tests.

Objectives and Evaluation Plan:

1. ***The elevation of the educational or grade level of 16 emotionally disturbed and educationally uninvolved or handicapped youngsters.***

   The educational level will be determined by pre- and posttests of the Gates-MacGinitie and the Metropolitan Achievement Tests. The grade level will be evaluated by progress in school.

2. ***To improve the tolerance of these emotionally disturbed youngsters for learning situations and to help them deal more successfully with their emotional problems.***

   Attitudinal tests were to be administered and attendance records of children in the project were to be furnished.

3. ***The creation of a special role of educational manager to assist in the remedial training and academic instruction of emotionally disturbed, behavior problem youngsters in cooperation with the local school.***

   The evaluation will be a summary of the salient features of the operation. In addition, a report of why children are lost from the program will be documented.

Methodology:

This description of the project follows its chronological phases at each of the four Youth Care Centers involved. Youth Care Center (YCC) 1 involved 15 boys; YCC 2, 15 boys; YCC 3, 15 girls; and YCC 4 included 12 boys.

In the beginning of the project the director initiated introduction and communication among the project coordinator, personnel of three schools, staffs of three Youth Care Centers and 57 young people. This stage was quite awkward because most of the participants either had not heard of the program or, if they knew of it, were dubious about its worth. At one school the vice-principal explicitly asked that the project be kept out of his school. (There had been previous efforts to help court committed youth in this school which, according to the vice principal, had failed and caused ill feelings.)

The next phase of the project involved testing the students to aid in goal establishment and placement into remedial classes. At this point, YCC 2 decided not to enroll their residents in the public schools. This resulted in a different program which is discussed below.

The students who were to be attending public schools then selected classes which would best suit their interests, abilities and achievement levels. Four students from YCC 3 were placed in typical academic programs. Three were placed in a curriculum weighted heavily in nonacademic or remedial courses. Of the students of YCC 1, all male, only one was placed in a typical academic program. Six were placed in remedial and nonacademic programs, with two or three independent study periods.

Counseling in various depths and amounts also occurred throughout the year. At the first of the year the presence of an adult who was not part of the public school staff was very important. This adult could prevent many delinquent acts induced by high anxiety through simple anxiety reduction. The following might have been prevented had an adult been present: A 16 year old boy was reprimanded by a P.E. teacher for not attending class. He left school, hitchhiked to Portland, broke into homes and stole personal articles. He was arrested and placed in jail. He was then returned to the YCC, attended school until the end of the quarter, passed the GED tests and has attended two quarters at the Community College.

During the project indepth counseling was done only by the students' personal YCC counselor in hopes of avoiding discrepancies in treatment.

Throughout the year the project director consulted with the YCC staff informing them of public school policies, personnel and student-school problems. At the same time he informed the public school about the YCC policies, the students' backgrounds and treatment goals and classroom techniques.

The project director arranged for the students' release from school attendance and registered them in the GED or YCC programs. Communicating decisions and policies among the YCCs, the GED school and the Community College became an on-going task for the project director.

The project took on an entirely different nature in YCC 2 due to their decision not to send their students to the public high school in their district. The staff based their decision on the previous year when most students suffered more emotional damage from the public school experience than could be offset by the center's treatment program. YCC 2 believed that the boys would benefit from nonattendance. Instead of attending school the boys would: (1) work at the YCC; (2) spend much more time in group counseling; and (3) participate in a part time educational program directed by a Title I teacher aide.

For the first half of the year the project director helped YCC 2 by testing the students, consulting with their teachers and working individually with the students. The only students who benefited in any observable way by this program were those who were studying for the GED test. The remainder were not motivated to expend any effort on formal classroom educational endeavors (grammar, literature, history, math) any more than they had been in previous schools. They were receiving no credits and had no goals. The reasons they attended were that they were released from work at the YCC and they were able to ride to the Community College four times per week. Once there, little of educational value was accomplished. The only motivational force was the teacher-student relationship, which the students had previously learned to disregard.

As the year progressed numerous plans, techniques and goals were discussed between the project director and the YCC staff and teacher. The project director wrote a proposal for the hiring of a certificated, full time teacher to be hired by the school district and to be placed at the YCC. An educational plan was then prescribed by the project director and the YCC staff, discussed with school district superintendent and principal, and accepted much as follows:

1. On arrival, youth will be tested for intelligence, achievement and aptitude.

2. Tests plus personal input in conferences will be used to establish individual goals for each student.

3. The person will then be placed into Interest Groups which will be primarily motivational: personal habits, health, hygiene, physical activities, etc.

4. After orientation from 3, the student will develop a personal program which will make up approximately eight-hour days from the following packages: (a) career exploration; (b) interest groups; (c) basic academics; (d) basic skills; (e) work.

Individual packages will be made up in all five areas. Each package ideally will be goal oriented toward learning of something beneficial to the youngster. Credits will be given for accomplishments in subject areas which are equivalent to the public high school curriculum. YCC rewards will be given for accomplishments which are not accredited.

5. The most important aspect of this plan is that it ties together the educational, vocational, recreational and correctional packages of the YCC. Educational advancement, academic or not, now plays an equally important part in the plans of the YCC rather than a negative, school oriented force. Young people will choose to read or to pound fence posts, depending on their immediate needs. They will be made aware of the social demands of high school graduation or GED, as well as work skills and vocational demands. They will not be forced to study or to sit in a class unmotivated, or to read something they do not like. They will receive no reward unless energy is invested in learning activities. Trips and travel are scheduled regularly for those accomplishing their goals. Those not working toward goals will stay at the YCC.

6. The teacher will be working with the students in numerous ways: (a) making up learning packages; (b) tutoring on specific learning problems; (c) setting goals with students; (d) recording and coordinating individual efforts; (e) evaluating contracted learning packages; (f) keeping attendance records for timed packages and other records; and (h) helping in placement beyond YCC school.

7. Placement: At a time agreed upon by staff and student, placement outside the YCC school will occur. This may be a part time or full time enrollment in the public

high school's academic or career education program, in the Clackamas Community College academic or vocational program, in the GED school, or to another school district, armed forces or directly to a job. At this time the YCC teacher will coordinate credits with the high school and send the transcript to the referral source.

Results:

1. ***The elevation of the educational or grade level of 16 emotionally disturbed and educationally uninvolved or handicapped youngsters.***

See Tables I and II. An examination of these two tables shows academic gain in only a few instances. As a group the results are nonsignificant.

2. ***To improve the tolerance of these emotionally disturbed youngsters for learning situations and to help them deal more successfully with their emotional problems.***

The comments of the educational mangnager follow: "There is little evidence that tolerance for learning situations other than those with tangible rewards was improved by this project. Tolerance, measured by student interviews, records of attendance and observations, improved when rewards were relatively immediate and pertinent."

The following observations and comments refer to delinquent student's tolerance for learning situations:

a. The GED School staff reported that students' attendance rates were usually nearly perfect when the students realized that they could learn enough to pass the GED tests.

b. Attendance rates were much better at the GED school than at the public high school for the same students. The students believed this was because they would be finished when they could pass the test, i.e., the more time they spent at school, the more they could learn and the sooner they could get out of school and get a job.

c. The most common reason for not attending certain classes or doing assignments was the comment, "What good does it do to learn that?" There was little improvement in most students' ability to apply regular school work to any larger goals. Many times students said they attended because they had to. Five or six students, while attending classes regularly, refused to do the minimum amount of work to pass the course.

d. Tolerance for nonschool learning situations was extremely high. Students were eager to learn how to roof a house, paddle a canoe, clean fish, take honey from a beehive and other nonacademic learning situations.

The following are comments and observations relative to student attendance:

a. The students who disliked school the most were released from compulsory attendance and enrolled in the GED school where attendance improved.

b. As the year developed, students became less anxious and fearful of classes and teachers and attended more regularly.

c. As the year progressed, attendance became forcibly required with the penalty of enjailment for noncompliance. Student attendance improved considerably when counselors checked each classroom. Two boys were taken to jail to think about school attendance.

d. Girls' attendance was better than boys. The girls, after their initial anxiety, were more willing to attend classes regularly for the reward of adult praise and for $.25 per week per class for perfect attendance.

e. Teachers were asked to sign a weekly attendance and progress report. Girls were more willing to have these reports than boys were. Boys, even when attending class regularly, thought of this act as degrading and refused compliance.

f. Given a choice between regular attendance and being sent to McClaren School for Boys, some said the latter was preferable.

g. When skipping classes was a result of high anxiety, it was usually beneficial. In the students who had not developed tools for dealing with their fears and anxieties, skipping class, which represents avoidance, was the least detrimental method of expressing hostility or acting out. While this sometimes led to perpetuation of avoidance of classes, in part due to the fear of punishment by the teacher upon returning, skipping often provided the balance which led to improved attendance.

h. In some emotionally disturbed young people punishment served as a form of reward or reinforcement. Students would set themselves up for punishment by skipping class.

i. Attendance based solely on fear of reprisal is incongruent with development of the independent decision making process, which is another goal of therapy. Example: K. H., a 12th grade boy, skipped approximately 1/3 of his outdoor recreation classes. From the summer recreation program at his Youth Care Center, he had an excellent understanding of the information taught in the class. He skipped these classes, he claimed, because they bored him, they were a waste of time and he wished to use his time working on art projects. His art teacher had agreed to let him work in the art room at any time of the day. His plans were to enter an art college after graduation from high school. The time spent "skipping" one class was more profitably used in another way. He enjoyed art but felt forced to attend recreation class. The question herein raised is whether there is a positive or negative correlation between attendance and emotional adjustment. A guess would be that a

Table I

Gates-MacGinities Reading Test

Student	Pretest Vocabulary	Grade Score Comprehension	Posttest Vocabulary	Grade Score Comprehension
1	9.6	8.1	Drop	
2	8.4	6.0	8.8	7.2
3	9.1	10.1	9.6	10.3
4	14.1	13.9	Drop	
5	15.9	14.6	15.2	14.6
6	7.6	7.3	9.2	9.0
7	11.3	9.8	Drop	
8	5.2	6.8	6.4	7.6
9	5.8	8.1	Drop	
10	14.1	10.5	14.2	12.1
11	6.3	7.9	4.8	5.2
12	7.6	4.8	8.4	6.6
13	8.8	6.0	Drop	
14	8.8	7.7	Drop	
15	5.2	8.7	Drop	
16	14.4	13.9	Drop	
17	7.6	5.9	7.5	5.0
18	8.8	7.9	10.1	7.9
19	10.1	10.8	Drop	
20	9.8	7.8	9.0	7.2
21	6.4	6.8	6.8	6.8
22	6.8	6.5	6.9	7.1
23	10.1	9.8	10.4	10.2
24	7.6	8.3	5.6	5.1
25	8.9	9.9	8.4	8.8

range exists in different individuals from a +1 to a -1 correlation. For some students some classrooms became a source of security and reward and attendance improved; in some cases this reflected a dependency relationship rather than adjustment. For most of the more anxious students these conditions did not exist in any class.

Validity of the test results is questionable for the following reasons.

a. Students believed the tests to be of no practical value, and thus refused to expend their greatest effort. "What's in it for me?"

b. Anxiety reduction techniques were of help to some students taking the tests but reduced test motivation in others.

c. Many students had been tested so often that they refused full cooperation, particularly on posttest.

d. Many students had only plans for vocational training and considered academic testing to be a waste of effort.

e. Posttests were administered during the busy spring schedule: good weather, softball games coming up, finals at school for those still enrolled. Motivation was low.

(For attendance results, see Table III.)

The Youth Care Centers were responsible for many of the absences of the students in the public school. Some absences were previously arranged, such as for a hunting trip. Other absences were allowed by the Youth Care Centers due to emotional or physical conditions. Weekly complex meetings involving YCC's 1 and 3 sometimes lasted into the morning hours and required deep emotional energy of many participants. Rising to catch a school bus the following morning was an extremely difficult chore for some.

Attendance forms were maintained rigidly by some teachers and totally ignored by others. Single period absences often counted as full day absences but sometimes were not counted at all. The curriculum and schedules at the school did not lend to maintenance of records. Schedules changed every quarter. Schedules varied from day to day. For example, art might be taken for one hour on Monday,

Table II

Metro Test Results
Pretest/Posttest

YCC 2	Reading	Composition	Math	Science	Social Studies	Average
1	35/40	28/30	36/43	48/48	40/42	37/40
2	47/45	49/42	44/48	47/52	50/50	47/47
3	42/43	31/44	46/48	34/31	44/49	39/43
4	59/55	55/52	54/58	38/44	52/53	52/52
5	32/32	48/36	40/35	36/32	54/36	42/34
6	35/43	45/48	51/52	36/42	45/45	42/46
7	36/52	45/54	59/58	41/48	45/56	45/54
8	56/58	50/60	47/49	42/44	46/52	48/51
9	25/40	24/24	30/34	26/31	32/44	27/35
10	61/60	54/58	48/44	45/41	56/58	53/52
11	45/42	46/46	34/42	32/42	43/52	40/45
12	38/45	34/37	41/39	36/40	41/42	38/41
13	52/61	46/50	41/42	43/45	54/57	47/51
14	34/36	36/35	44/48	42/42	38/43	39/41
15	41/47	40/43	50/50	48/52	45/38	45/46
16	48/42	46/40	49/53	49/54	42/32	47/44
17	36/36	32/30	48/33	32/34	36/34	37/33

two hours on Tuesday and two hours on Thursday. Other classes would alternate with this class.

3. The creation of a special role of educational manager to assist in the remedial training and academic instruction of emotionally disturbed, behavior problem youngsters in cooperation with the local school.

Again, the results are as quoted by the education manager:

> This project was subject to the biases, strengths and weaknesses of a single director. While the director was trained as a counselor, he was asked not to involve himself with indepth counseling because the students were already participating in individual and group therapy at their YCC's and school counselors worked with them in scheduling at school. The project director decided against tutoring and remedial teaching because the students who were behind level were enrolled in a nearly complete curriculum of remedial courses; remedial courses were available in math, reading, english and science. The students arrived home from school at 4:00 p.m. and had work responsibilities until dinner. They were tired of school by the evening, so very little tutoring was done after school.

The main responsibility of the director became that of a consultant to school staff, YCC staffs and students. Time spent with the three groups was about equally divided. Many changes occurred during the year in all three groups. Whether those changes were in any way a result of this project is difficult to say, but they certainly did affect the educational life of the students. Some of those changes were:

a. The vice-principal of the high school left during the third quarter.
b. The principal quit, effective at the end of the year. (Both of the above were replaced with extremely qualified, outstanding individuals who are well trained in behavioral sciences and competent in working with emotionally disturbed delinquent youth.)
c. During the year there were four different couples as residential counselors at YCC 1.
d. A thorough change in treatment philosophy occurred at YCC 2.
e. YCC 2 developed a working relationship with the public school, making services available and communications open.
f. The Community College is offering services, programs and tutors to the YCC.
g. The GED School has become a valuable educational resource for disturbed youth.

Following is a discussion of an assortment of other salient features of this project.

Summer Project. During the summer months the project switched from the school setting to the outdoors. Arrangements were made with the Juvenile Court to provide counselors and students for trips of three or four day's duration. These included trips to the beach, backpacking,

Table III

Attendance/Credits in Public School

YCC 1	Grade level 8/71	Grade level 8/72	Credits	Total days absent	Total days present	Entered School	Left School
1	11	GED Diploma	0	8	16	10/14/71	11/16/71
2	12	H.S. Diploma	10	30	138	9/17/71	6/8/72
3	10	00.5	4	32	129	9/27/71	6/8/72
4	10	10	2	21	102	9/28/71	6/8/72
						1/24/72	reenter
5	10.5	11	3½	13	63	2/8/71	6/8/72
6	10	GED Certificate	0	8	70	9/7/71	12/23/71
7	10	10.5	3	5	40	4/5/72	6/8/72
8	10	10.5	4	2	70	1/28/72	6/8/72
9	10	10	0	0	17	1/12/72	2/4/72
10	10	10.5	6½	28	125	10/5/71	6/8/72
11	11	11	1	24	41	2/2/72	5/24/72
12	11	11.5	5	27	148	9/7/71	6/8/72
13	10	GED Certificate	0	6	20	10/1/71	11/10/72
YCC 3							
1	10	10	0	12	39	9/7/71	11/16/71
2	10½	11	5	5	126	11/9/71	6/8/72
3	10	11	13	10	165	9/7/71	6/8/72
4	10	11	10½	24	151	9/7/71	6/8/72
5	10	11	11	6	169	9/7/71	6/8/72
6	10	10.5	6	17	129	9/7/71	4/19/72
7	10.5	11	–	4	29	4/25/72	6/8/72
8	10	11	9	19	156	9/7/71	6/8/72
9	10.5	11	–	16	22	3/14/72	6/8/72
10	10.5	11	–	1	48	3/27/72	6/8/72
11	10.5	11	4	13	78	1/25/72	6/8/72

fishing and canoeing. Ten such trips were taken, and fourteen or fifteen court selected young people were taken each time.

As a result of the summer educational-recreational project, forty-five court committed youth were to stay out of the Juvenile Detention Home and out of trouble for the summer, were to demonstrate, by participation, that they understood how to make positive, socially acceptable use of time in recreational activities, were to demonstrate that they could cooperate with a group of thirteen peers and four adults in group activities, and were to improve their self-understanding through group counseling.

One student of the forty-five was arrested during the summer on charges of possession of marijuana.

Thirty students learned how to navigate canoes in rapid flowing rivers. Forty students demonstrated skills in back-packing on four day wilderness trips. Twenty-two students learned how to catch, clean and cook fish.

In all the trips it was agreed by counselors and youth that cooperation among participants was exceptional. In activities such as team cooking, dish washing, camp making, fire building, clean up and particularly canoe paddling, outstanding cooperative efforts were demanded and realized. Only one case of refusal of cooperation occurred. A girl who participated in a beach trip joined the group with extreme emotional problems resulting from her family situation. At the beach she felt out of touch with the group, slipped off by herself and hitchhiked to her parents' beach home. After leaving she immediately called the court to inform them of her actions, so undue concern was avoided. In a sense, even her actions showed cooperation.

Group conseling took place daily on each trip. It is the belief of the counselors and youth that increased self-understanding was realized by all participants as a result of the counseling. One measure of this was that young people who had been violating laws were no longer violating laws.

GED School. In the GED school goals are immediately obtainable. When the student demonstrates on a trial test that he understands the subject area sufficiently to pass the GED test in that area, he goes to the testing center and takes the test. The student is rewarded for what he learns rather than how long he endures. For these students whose goals and gratification are extremely short term the GED school is very effective. This is often the case with the 16 or 17 year old students who have 9th or 10th grade credits. Instead of attending public school for three more years to obtain a diploma, they would rather attend a school with the prospects of receiving a GED certificate after learning necessary subject matter.

Attendance is kept rigidly. A student cannot skip school without being noticed. Yet he has the freedom to step outside the building for a cigarette when he wishes. Attendance is reported to the Youth Care Center each week. The staff at the GED school know where each student is, physically and educationally. There is a concern on the part of the GED school staff to help each student pass the GED test as soon as possible.

All students responded favorably to the GED school. Some said it was their only positive school experience. Apparently it was the first time some of them had been accepted as worthwhile students and had succeeded in educational endeavors.

Some YCC students function satisfactorily in the public schools because: (a) teachers often demand respect, which some students are willing to offer; (b) some teachers tolerate unique or unsuccessful behavior; (c) some students function well when expectations of success are reflected by memorization of factual information.

Most students have little ability to cope with abstracts that are of no immediate importance to them.

The GED school did more toward attaining the educational goals set for the young people in this project than any other schools.

After assessment of the difficulties between Youth Care Center students and public schools it is my belief that the educational program being initiated currently at YCC 2 is by far the best approach for delinquent youth. Treatment can be made consistent in all phases of the young people's lives during the time that they are working hardest to gain some emotional stability, security, self-worth and trying to reduce hostilities. When placed in a public school shortly after arrival at a YCC there is an extremely great chance that the person will act out delinquent tendencies. The environment which causes this has noticeable effects on people who are considered normal, but even greater effects on the labeled juvenile. The following list considers some of the conditions which exist for these YCC youngsters:

a. Taken away from home and family.
b. Placed in jail.
c. Labeled "delinquent."
d. Placed in an institution with unknown adult staff and "delinquent" peers.
e. Placed in a new school.
f. Labeled "delinquent" by new students.
g. Immediately suspect by teachers and students.
h. Placement in a school setting, which in many delinquent cases, was the reason the young person developed delinquent tendencies originally.

A decision to drop a student from the program was made exclusively by the Youth Care Center staff after consideration of what was best for the student. The continued residence at the Youth Care Center is contingent upon students' cooperation with efforts to change behavior. When they refuse to cooperate they are sent to some other institution such as MacLaren, Hillcrest or the County Jail. Some students demonstrated that their problems were more severe than the Youth Care Center was geared to handle. Other students were placed in foster homes or other programs upon completion of their treatment. The following individuals were lost from the program for various reasons.

Student 1. Hostility toward many Youth Care Center staff members and peers and refusal to work on his own problems. He was returned to jail for referral to some other program. He was achieving extremely well at school in a vocational program.

Student 2. This girl had had difficulty with teachers in the high school due to rigid enforcement of rules in business education classes. She was released from attendance at high school and placed in the Community College Continuation High School program. The amount of unstructured time there deterred her growth in responsibility. She became more and more hostile toward YCC controls being placed on her. She and a friend outside the YCC program fled in a stolen car. She was referred back to jail.

Student 3. This girl was placed in a foster home in a different district.

Student 4. This boy did not enroll in school at the first of the year due to extreme anxiety toward the school setting. When placed in school anxieties led to stealing keys from the P.E. teacher, breaking into locked rooms containing valuables and stealing many personal items. He was sent to juvenile court for placement.

Student 5. This boy refused to allow the YCC staff to work with him toward constructive goals. He became a leader of negative energies. He refused to cooperate and was referred back to court.

Student 6. This girl had reached a plateau in her development and was placed in a foster home.

Student 7. Boy enlisted in Marines.

Student 8. Boy placed in foster home.

Student 9. Boy returned to home of his parents.

Student 10. Girl placed in foster home.

This number of students leaving the project during the year gave an ad hoc quality to the entire program. For example, much time, energy and expense was invested by the program director in arranging contingencies for student 2 above. She was removed from the program immediately following stealing a car due to a decision made prior to that time relative to consequences for delinquent behavior. Thus, her development in the Title VI project also ended.

The "Independent Study Period" was designed for students to go to the cafeteria or other designated centers to study, talk or relax. During part or all of this period the students in the project usually left the school grounds to smoke. Students were not permitted to smoke on the school grounds and were not to leave the school grounds. These rules were made meaningless by the school administration's inconsistent enforcement of them. Students, while scoffing at the rules and the administration, were concerned about being caught and punished. The Independent Study Period thus provided both favorable and unfavorable conditions. It allowed reduction of classroom anxieties and provided the students with opportunities to talk with YCC peers. It provided a smoke break (only three of 57 YCC residents did not smoke regularly). It permitted some limited communication between YCC students and other students. The totally unstructured time it provided was rarely used responsibly by disturbed young people. The free time led to frequent skipping of classes, to conflicts with non YCC students and to conflicts with school personnel.

Throughout the year the schedules of the disturbed students were constantly changed in an effort to match personalities with interests and abilities in order to avoid conflicts. For the more seriously disturbed, alternatives diminished rapidly.

This project proved of no apparent value in appreciably altering public school teachers' ability to understand and help emotionally disturbed delinquent youth. After much study and experience teachers arrive at treatment philosophies and techniques which are not easily changed. A prevalent attitude of many teachers is that students should follow rules and procedures, and that those who do not conform should be punished in some way or removed from the classroom or school. When rules or conditions exist disturbed students tend to challenge them as a measure of self-worth. Often teachers perceive this challenge as a personal attack, in which case they defend themselves. Involved to a tremendous extent is the ego, the self-confidence and the awareness of every person working with delinquent youth.

Confrontations cannot be avoided as long as people project emotional needs, problems and fears, but they can be understood. While the YCC's provide extremely good therapy for the students during the year, many of the young people lack self-understanding while attending school. The youngsters learn who they are, what they feel, what effect they have on others and others have on them. This learning takes place during the students' residence at the Youth Care Center. When the person learns how to function in school and the rest of society, he leaves the YCC.

It is the belief of the YCC directors and this project coordinator that the public schools do not provide the most beneficial educational program possible for most emotionally disturbed youngsters, and that for many delinquent youths the schools are actually detrimental. The schools unintentionally create the heightened anxiety and lack of understanding and structuring that leads the young person back into trouble. People in and out of the schools are incapable of viewing young delinquents as people with emotional problems. It is the belief of the project director that many people, due to their own emotional constitution, will never be able to tolerate, understand or help delinquent youth. Promoting a consistent treatment plan for emotionally disturbed delinquent youth would require hiring teachers who can work effectively with these students. It is the opinion of this writer that the controlled setting of the YCC school described above, combined with the frequent public contact, which all the YCC's guarantee, is the most beneficial educational and social balance possible for the emotionally disturbed youngsters of Oregon.

Third Party Evaluator's Comments:

This project was a highly innovative model to deal with one of the most difficult school age populations imaginable. The project established an education manager who was to work in the Youth Care Centers in the education and counseling of delinquent children. These children, all high school age, have a history of difficulty with schools and with the culture. Thus the task facing the project director was formidable.

There is no way in which one can say that the project succeeded in the achievement of its goals. It could not, for instance, change the academic life and performance of the students involved. In the words of the education manager, "There is little evidence that tolerance for learning situations other than those with tangible rewards was improved by this project. . ." Thus the objective data indicate that the position of the education manager made relatively little impact in the lives of the children.

Yet, the third party evaluation team is reluctant to close the door on this model as a result of this experience. This was a most difficult age group and these were children who had long ago rebelled against schools. The education manager, moreover, was attempting to influence the situation in a generally noncooperative environment on the part of the Youth Care Centers and also on the part of some of the education administrators. The cause primarily of this lack of cooperation was an ambiguous role which was not clearly defined. The education manager was essentially unable to establish systematic programs for these children to test adequately the theory that he could, or a position similar to his could, change the behavior of these children.

For instance, one is impressed with the fact that the most motivating element for these children was to be able to leave school or to engage in tasks which were not academically oriented. Repeatedly through the account rendered by the education manager we find evidence of success in outdoor experiences, nonacademic tasks and academic tasks which promised an early relief from the boredom of high school curriculum.

The conclusion of the education manager is that the school did not provide a proper environment for these children. He bases this on the model afforded by Youth Care Center 2, which essentially removes the children from the school environment and presents a total environment for them outside of the school situation. He also partly bases this conclusion on the success that the GED Center had with these children. One must question this conclusion since the school has not had an adequate opportunity to structure the situation to provide the immediate tangible rewards for these children. There is evidence in other settings (reference: Parkrose Project) that a structured environment in a high school or junior high school setting may produce clearer results than were achieved here. Again, the population had not rebelled to the same extent as the population described in this project. Yet this project does not offer conclusive evidence that the structured environment with immediate tangible consequences will not modify the behaviors of delinquent children. Until that test has been adequately made, the schools cannot be written off as a change agent.

Title of Project: *Regional Program Providing Ancillary Diagnostic and Therapeutic Services for Physically Handicapped Youth*

Location: *Corvallis School District 509J*

Type and Number of Children Served: *142 physically handicapped*

Funding Allocated: *$10,500*

Project Beginning Date: *July 1, 1971*

Project Ending Date: *August 31, 1972*

Background and Rationale:

In 1970 a project, funded by Title VI, was undertaken in the Corvallis School District to provide physical therapy services for an identified population of physically handicapped children. The project was experimental in nature and therefore required organization and recruitment in the beginning stages. It was not until February, 1971 that the project was functioning with a referral system and an Advisory Committee in which therapy evaluations and assignments could be handled. A part time physical therapist was included during the last few months of the project with audiological services being provided by Oregon State University. During the summer of 1971 both physical therapy and audiology were continued for the most severe.

With the addition of a new physical therapist, the back up of the Advisory Committee, and school personnel who were more aware of the services available, plans were made for continuation and expansion during 1971-72. Meetings with physical education staffs, school counselors and principals, and public health nurses provided background information, names of students and the scope of cooperation which could be expected. The most immediate needs were: (1) establishing regular physical therapy at Mt. View elementary school, where the largest number of multiply handicapped children were concentrated; (2) expansion of the project to include adaptive physical education in the secondary schools; and (3) establishing diagnostic, corrective and educational services for hearing impaired children in the Corvallis area who qualified under the physically handicapped program.

Objectives and Evaluation Plan:

1. ***To establish criteria which identify handicaps appropriate to a school sponsored physical handicapped program.***

   A report of criteria established was to be provided.

2. ***To secure personnel and establish methods for accepting or rejecting referrals for therapy.***

   A report indicating which personnel were hired and a description of their qualifications was to be submitted. In addition, a description of the working of the committee was to be provided.

3. ***To secure approval of the program by physicians and other health program personnel.***

   A postcard survey was to be accomplished.

4. ***To secure maximum parent and school involvement in the therapy.***

   The number of parents becoming involved was to be reported in accordance with the following format: 1) number not involved; 2) number for which physical therapist would provide treatment with parent help needed but not provided; 4) number for which physical therapist provided the treatment, as did the parents.

   To evaluate the other part of this particular objective, school involvement, the personnel from the various schools who participated in the project were cited.

5. ***To provide optimum therapy where needed.***

   Pre- and posttest measures were to be administered using appropriate instruments as determined by the physical therapist.

Methodology:

Physical Therapy Program. Referrals for physical therapy came from principals, teachers, parents, physicians and other special services personnel. Screening of these referrals was accomplished by the Director of Special Education and the physical therapists. Screening involved parent permission, request for services and physician's release information. Prescriptions for physical therapy services in the hospital, clinic or school were then secured from the physician.

Next, a review, which included the medical diagnosis and history, the therapy evaluation and recommendations, was presented to the Advisory Committee. Certification by this committee allowed a full program to proceed.

Therapy conducted at the hospital or clinic was reviewed regularly with the staff and monthly progress reports were attached to permanent records.

Therapy was provided 3 days a week at Mountain View School for both T.M.R. and handicapped children in regular classrooms. Their medical records and progress notes were maintained at school in a confidential file. Through arrangements with the principal and teachers, therapy was provided as part of the school curriculum when it was the preferred method of treatment. Functional activities initiated by the therapist were expected to be carried on in the home and/or school.

Pre- and posttest evaluations were conducted on all participants. However, evaluation measures were implemented throughout the program with gait and posture training to improve the body image. In addition, each participant was reviewed every 3 to 4 months or upon termination from the program.

Physical therapy was continued at Good Samaritan Hospital from mid June to mid August for five multiply handicapped children. It was felt a minimal program was necessary to prevent deterioration prior to resumption of school in 1972.

Adaptive P.E. Program. Students were selected for adaptive P.E. programs in compliance with criteria established by the Physically Handicapped Program, with review by the Advisory Committee. They were then placed in a secondary level class with a certified P.E. teacher. Pretest evaluation was conducted under the supervision of the registered physical therapist.

After determining the degree of handicap, corrective exercises were devised to meet individual rehabilitative needs. Specialized equipment such as the "universal gym," weight lifting equipment, mats, small trampolines, balance beams, rebound nets for eye-hand coordination, and miscellaneous P.E. equipment as available were used. These activities attempted to include involvement of the school's P.E. staff to insure this as an integral part of the school curriculum.

Posttest evaluations were again supervised by the physical therapist at the end of the school year.

Program for Hearing Impaired. Screening and initial referral of children to the program came from district speech clinicians or physicians. Sophisticated audiological evaluations were then provided by the Oregon State University Speech and Hearing Department. Prescriptions and recommendations were prepared by their certified audiologists.

Individualized instruction was provided twice weekly by a certified teacher of the deaf. This instruction included hearing and orientation, speech reading, language, and skills related to attending to school tasks. Parent instruction and in-service training for classroom teachers were significant aspects of the program.

Evaluation of programs was based on specified objectives and a system of continuous monitoring of progress relative to those objectives.

Results:

1. To establish criteria which identify handicaps appropriate to a school sponsored physically handicapped program.

Criteria for identification and initiation of individuals into the physically handicapped program was developed in two areas: (a) Treatment. Services provided by a physical therapist or audiologist under the supervision of a physician; (b) Exercises. Individualized exercises in the school setting to correct or adapt to a handicap (adaptive P.E.). Eighteen procedural items were developed in these areas to initiate programs for individuals. These included identification of child, contact with the home, contact with a physician, screening by a committee, and recording programs and costs.

2. To secure personnel and establish methods for accepting or rejecting referrals for therapy.

Staff personnel serving the project were divided into four categories. (See Table I).

Table I

	Total Number	Description
1. Regular staff	5	Director, Two physical Therapists, Field worker, P.E. Instructor
2. Contracted services	10	Physical Therapists, Audiologists, Teacher of the Deaf, Public Health Nurses
3. Volunteer services	91	Senior and graduate level Students, O.S.U.
4. Advisory Committee	4	Orthopedist, P.E. Specialist, Physical Therapist, Jr. High Principal
TOTAL	110	

3. To secure approval of the program by physicians and other health program personnel.

Questionnaires were mailed to medical and health personnel in the project area in an effort to inform them of the project services and secure their approval of the program. A report of personnel contacted and the resultant return is presented in Table II and Table III.

4. To secure maximum parent and school involvement in the therapy.

Table II

	Total Sent	Total Received
Physicians	74	60
Public Health Personnel	12	9
Physical Therapists	10	9
Totals	96	78

Parent involvement in the project is reported in Table IV. Staff evaluation indicates average or above average cooperation for 70% of parents contacted.

A total of 52 school personnel contributed to the functioning of the project. Ten of these participated in a direct supportive role through referral procedures, conducting adaptive classes, contacting parents, assisting with testing, and working with volunteer staff.

5. ***To provide optimum therapy where needed.***

Physical Therapy Program. Results are herein reported for 23 children receiving physical therapy at either Mountain View Elementary School or Good Samaritan Hospital. Pre- and posttests were given in the following areas of therapy as determined by the physical therapists: range of motion; manual muscle; motor development; activities of daily living; motor perception; and gait evaluation. The length of therapy for these children varied from 1 month to 1 year with the average length of therapy being 7 months. Table V shows the range of therapy delivered and Table VI shows the per cent of improvement recorded for the therapy programs.

Adaptive P.E. Program. Individual adaptive P.E. programs were initiated for 23 students at the high school level, 14 students at the junior high level and 9 students at the elementary level. Programs at the secondary level were developed for students who needed corrective exercise due to physical handicaps, physical injuries or other conditions which made regular P.E. impractical. Individual records were maintained to measure progress for the period of time students participated in the program. Where necessary, prescriptive services of physicians or physical therapists were secured. The length of time spent in the program varied from 6 weeks to 9 months. Programs developed and records kept were in the following basic categories: range of motion; body proportions and alignment; weight training; progressive resistive exercises; coordination exercises; back exercises; manual muscle; and swimming. Per cent of improvement recorded for secondary students is indicated in Table VII.

Adaptive P.E. programs were implemented in motor perception for 9 elementary students, ages 5-13 years. The Purdue Perceptual-Motor Survey was administered as a pre-posttest measure. Results of the programs are reflected in Table VIII.

Program for Hearing Impaired. Students referred to the program for hearing impairments were evaluated to determine their need for therapy and education as related

Table III

Results of Medical Personnel Questionnaires

Number Aware	Number Unaware	Number Having Used Services	Number Declared Interested if They Had Known	Degree of Approval			
				Questionable	Partial	Valuable	Very Worthwhile
55	23	11	0	0	3	14	15

Table IV

Parent Involvement

				Number Cooperative		Number
Area	Excellent	Average	Inconsistent	Disinterested	Not Available	Noncooperative Number Contacted
Mountain View Program	6	5	3	0		14
Adaptive P.E.	12	10	3	2	4	31
Motor-Perceptual	3	2	1	1	2	9
Hospital & Clinic	4	2	1	0	0	7
Speech & Hearing	4	3	0	2	2 (Farm Home)	11
TOTAL	29	22	8	5	8	72

Table V

Classification of Therapy

	R.O.M.	Manual Muscle	Motor Development	Activities of Daily Living	Motor Perception	Gait Evaluation
Number of Children Receiving Therapy	12	10	14	5	3	3

Table VI

Per Cent Improvement of Total Therapy Program

	0%-5%	5%-10%	10%-15%	15%-20%	20%-25%	25%-30%	Total
Number of Children Achieving Improvement	3	1	7	2	4	5	22

Table VII

Per Cent Improvement of Adaptive P.E. Programs (Secondary Level)

	5%-10%	10%-15%	15%-20%	20%-25%	25%-30%	30%-35%
Number of Students Achieving Improvement	3	16	7	3	2	2

Table VIII

Adaptive Physical Education – Motor-Perceptual (Elementary)

Student	Length of Time in Program	Age	Balance		Body Image		Laterality & Directionality		Gross Motor		Fine Motor		Per Cent of Improvement
			Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	
1	12/71-5/72	8	30%	50%	50%	60%	60%	75%	50%	60%	75%	85%	15%
2	10/71-5/72	10	25%	25%	80%	85%	50%	60%	35%	50%	40%	50%	9%
3	1/72-5/72	5	30%	35%	50%	50%	75%	80%	50%	50%	40%	50%	5%
4	3/72-5/72	6	70%	90%	60%	80%	60%	75%	75%	95%	75%	90%	20%
5	1/72-5/72	6	30%	40%	25%	30%	50%	70%	40%	50%	25%	30%	10%
6	2/72-5/72	5	50%	75%	40%	50%	40%	50%	75%	80%	70%	80%	15%
7	2/72-5/72	5	25%	35%	25%	25%	20%	25%	30%	35%	40%	50%	7.5%
8	11/71-5/72	13	50%	60%	50%	50%	30%	35%	40%	50%	40%	50%	10%
9	2/72-5/72	11	80%	90%	75%	85%	100%	–	65%	75%	60%	75%	12%

to their hearing impairment. This evaluation included staffings by specialists in audiology, speech, hearing aids and education. Audiological testing equipment and sound laboratories at Oregon State University were used for conducting diagnostic evaluation of hearing impairments.

A total of twenty-five referrals were made to Oregon State University. Twelve of these were follow-up evaluations and thirteen were new referrals. A total of eleven audiological exams were conducted at the Oregon State University Audiology Clinic. Six of these referrals were approved by the Advisory Committee for individualized instruction.

Conferences concerning these student referrals were conducted with audiologists, parents, counselors, principals, teachers and speech clinicians.

Individualized programs of instruction were then developed by the itinerant teacher based upon each student's needs identified through the diagnostic procedures. Programs designed included: (a) a detailed specification of instructional objectives; (b) precise organization of methods and materials to attain these objectives; (c) careful determination of each pupil's present level of competence in a given subject; (d) individual evaluation and guidance for each student; (e) frequent monitoring of student progress toward each objective; and (f) continual evaluative feedback for revising and improving instructional procedures.

Student 1. Age 12; mild bilateral conductive hearing loss.

1. Classroom motivation and behavior will be changed and improved by using operant conditioning techniques for completing assignments, attending and study time.
2. Reading will be improved by development of word recognition, comprehension and word attack skills.
3. Adaptation to her hearing loss will be improved through auditory discrimination instruction.

Criteria established for achieving goal 1 was reached early in the program (see Figure 1 for example of progress). A total of 153 words were learned in word recognition, and criteria of 100% was reached for auditory discrimination on 50 word pairs.

Student 2. Age 9; total sensori-neural hearing loss in right ear, normal hearing in left ear.

1. Meaningful language experiences will develop and expand the desired language skills for improved expressive language.
2. Auditory training instruction will benefit the adaptation to his hearing loss.
3. Communication efficiency will benefit from lip reading instruction.

Criteria established for language development was achieved (see Figure 2). The student was able to repeat auditory discrimination tasks when visual and auditory attending was permitted. However, the student experienced difficulty when visual cues were withdrawn.

Student 3. Age 5; severe articulation deficiency due to dysphasia.

1. Oral communication will be improved through meaningful use of oral language and language programs.
2. Speech will be improved through instruction and development of consonant sounds.

This student demonstrated improvement in the use of oral language (see Figure 3) and language patterns. Recommendations were made for continued work in speech.

Student 4. Age 6; moderate bilateral sensori-neural hearing loss.

1. Communication efficiency will benefit from lip reading instruction.
2. Adaptation to her hearing loss will be improved through auditory discrimination instruction.

Monosyllabic words and phrases presented in lip reading instruction were accomplished with 100% accuracy. Difficulty was experienced when intermittent voice was used and ambient noises were added. Stories presented with lip reading were retold accurately after instruction.

Auditory discrimination of words using voice and no visual clues were accomplished with 100% accuracy (see Figure 4).

Student 5. Age 4; bilateral hearing loss.

This student was referred by her teacher for speech and language evaluation in a Montessori School. Eight sessions were held in the child's home using toys, objects, colors, etc., to assess language ability. Receptive language appeared to be good, as indicated by the ease with which she could follow verbal commands, find objects and answer questions. Further speech, language and audiological evaluations were recommended before programs are developed.

Student 6. Age 10; fluctuating bilateral hearing loss.

Surgery performed after the initial audiological evaluation restored hearing. Conferences with the student's teacher indicated work was needed with listening and attending. Programs were being developed when the hearing impaired program was terminated.

In addition to the six students who received individualized instruction, follow-up and initial visits were completed for eighteen of the students referred to the physically

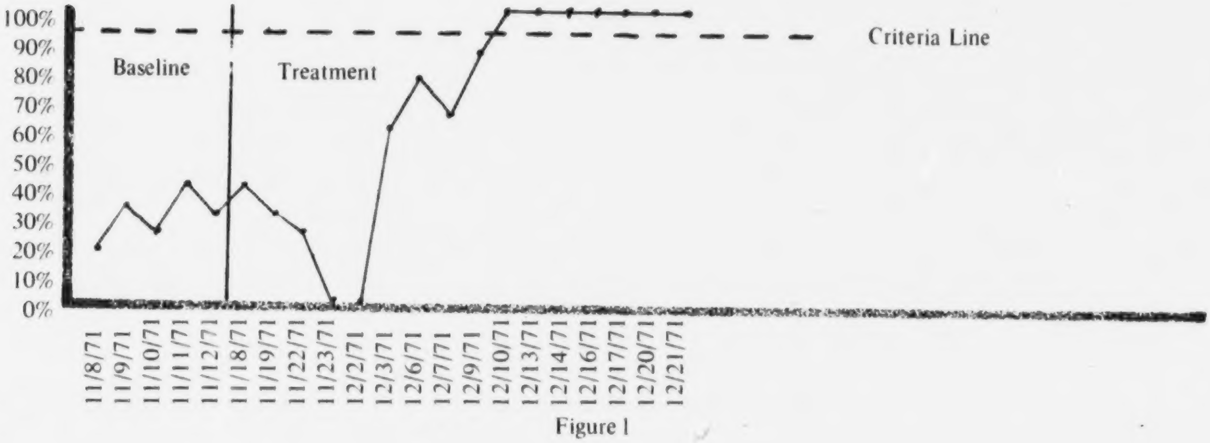


Figure 1

Student 1
Assignments Completed

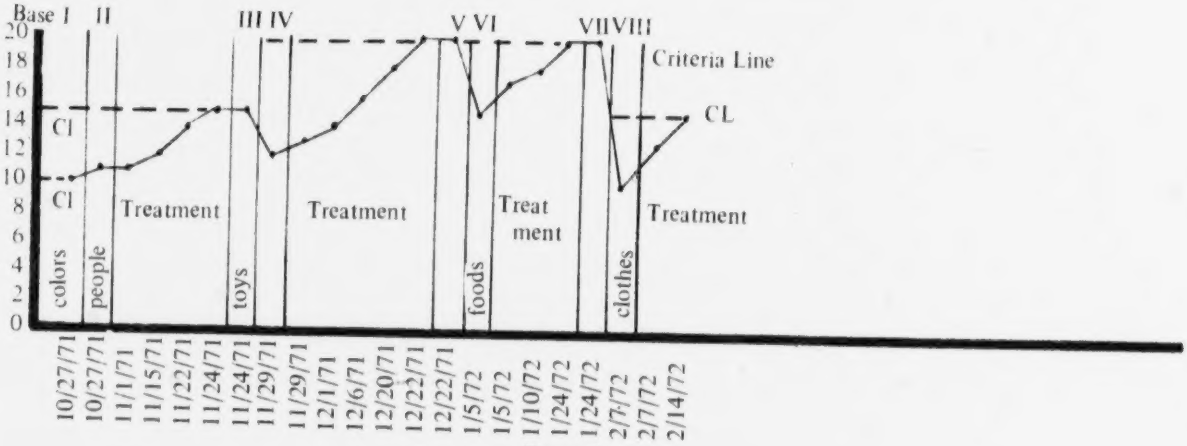


Figure 2

Student 2
Naming

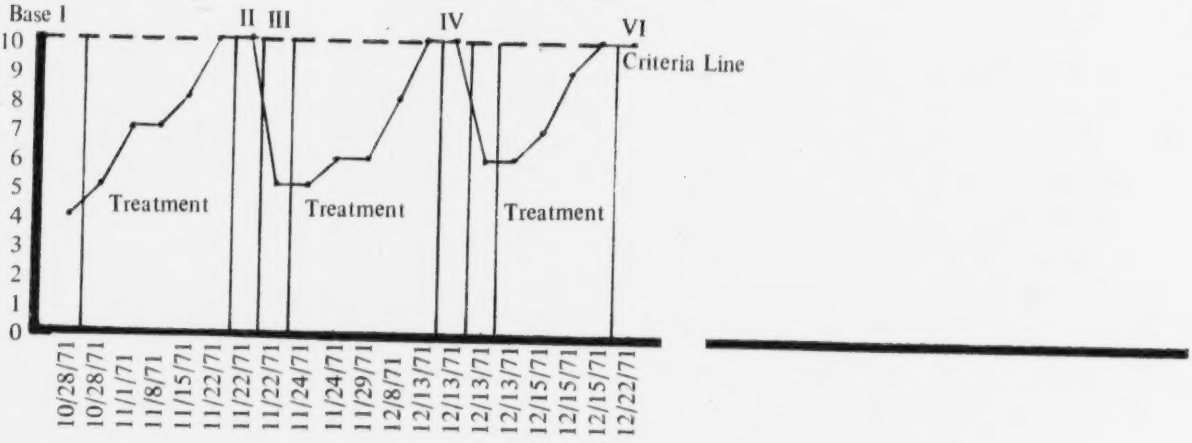
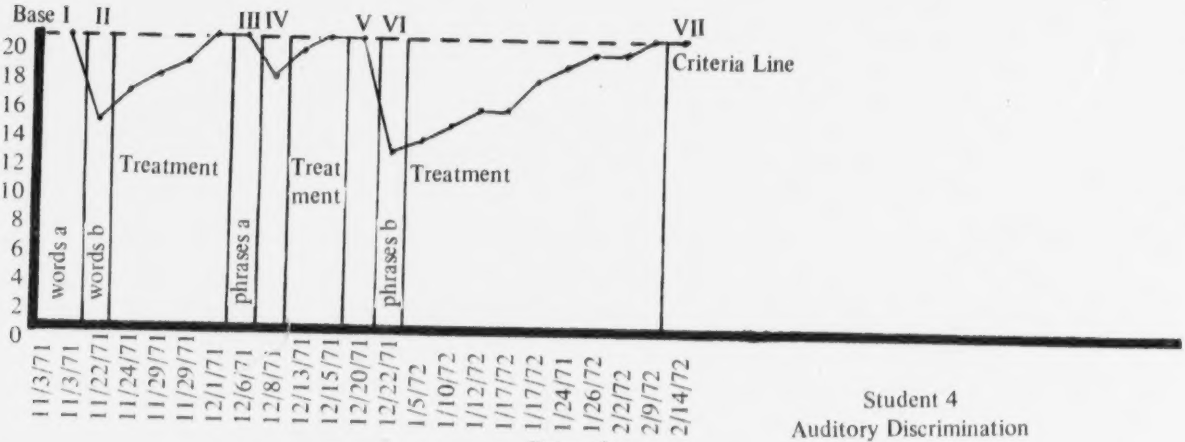


Figure 3

Student 3
Full Statements



Student 4
Auditory Discrimination

Figure 4

handicapped program.

Due to premature utilization of funds budgeted, the hearing impaired program was terminated in February of 1972.

Third Party Evaluator's Comments:

The project described in this report attempted to provide a much needed service to a neglected population. This type of service takes on an added significance relative to the trend of providing education for all children in the public schools.

Due to the large number of children served, administrative components were a necessary part of this project. Generally, these components were successfully accomplished as indicated in the results of objectives 1–4. The procedures reported for initiating therapy programs do not meet the conditions of objective 1. This was due to a misinterpretation of the objective by the project directors. Criteria for identifying handicaps appropriate to entry into the program are being developed for future programs.

Special notice must be made of the utilization of a large number of volunteer personnel from Oregon State University. Their involvement must be considered significant in terms of the number of children served. The third party evaluator feels, however, that a more extensive report of parent involvement would provide a better view of the significance of that involvement. Data are available from other studies which indicate parental involvement to be a vital factor relative to the training of handicapped children. It is suggested, therefore, that this aspect of the physically handicapped program be further developed.

Providing optimum therapy where needed must be considered the major component of this project. It is, therefore, important that the objectives to achieve this component be well defined. It is also important that data collected provide continuous feedback relative to reaching those enabling objectives and ultimately, optimum therapy for each individual.

The above elements were not evident in the data reported by the physical therapy and adaptive P.E. programs. Therapy was provided for a large number of children and improvement was reported as a result of that therapy. However, the significance of that improvement is difficult to determine due to the failure to establish criteria for successful achievement of the major objective. It is suggested that future programs in these two areas have such criteria established and that they develop methods of monitoring movement towards achieving that criteria.

A good example of desired elements are found in the data reported for the program for hearing impaired. Development of objectives and continuous monitoring for each individual provides a basis for evaluating the degree of success achieved. It is unfortunate that the audiological portion of this project was unable to continue during the entire school year.

Title of Project:	*Class for Emotionally Disturbed*
Location:	*Bethel School District 52*
Type and Number of Children Served:	*7 emotionally disturbed*
Funding Allocated:	*$10,500*
Project Beginning Date:	*August 20, 1971*
Project Ending Date:	*June 9, 1972*

Background and Rationale:

Due to socio-economic changes in the School District, an increasing number of socially and emotionally maladjusted students have been entering school. This group of handicapped students was not being served by the District. It was determined that a class of ten students, a teacher, and an aide, using specialized materials and procedures would serve this unmet need.

Objectives and Evaluation Plan:

1. ***Diagnose behavioral problems and academic deficiencies.***
2. ***Provide individualized instruction to promote positive social behavior and improve academic performance in the basic skills area.***
3. ***Conduct counseling sessions in individual work with the student to assist in the development of positive behaviors. Work with regular teachers to help integrate students back into the classroom.***
4. ***Integrate students back into the regular classroom.***

Evaluation:

To satisfy objectives 1 and 2 the Hill-Walker Behavior Problem Checklist would be given as a pre- and posttest measure and would be administered monthly as a measure of behavior and social adjustment. The individual graphs for the plotting of behavior problems for each of the children would be submitted. Academic performance and progress would be measured by pre- and posttest measures such as the Gates-McKillop Test, Gates-MacGinitie Test, and Standard Diagnostic Test for mathematics, in addition to some teacher made tests. Also, anecdotal records would be provided in addition to a report of the number of children who returned to the regular classroom and their performance in that classroom.

Methodolgy:

The project was conducted as a modified engineered classroom. The process for selection of the students was referral, evaluation, case staffing, medical and/or psychiatric diagnosis to determine placement in the class. The children in the classroom were placed on a token reward system. They received points for academic performance and acceptable behavior. At the end of the day the children could either spend their points for reinforcements, or save their points for something more expensive, or their points could be utilized the following day for free time. Upon successful demonstration that academic performance is increasing and behavior problems decreasing, the child was phased back into the regular program.

Results:

1. ***Diagnose behavioral problems and academic weaknesses and develop methods of acceptable behavior and correction of academic deficiencies.***
2. ***Provide individual instruction to promote positive social behavior and improve academic basic skills area.***

Table I shows the results achieved in the Hill-Walker Behavior Problem Checklist. An examination of the Table indicates that the Hill-Walker Behavior Problem Checklist was not administered monthly except during the last four months of the program, and that only three students, numbered 3, 5, and 6, was the test administered to at the beginning of the school year. This is undoubtedly due to some of the problems the program had relative to location of the class and the teacher leaving the program, which will be discussed at the end of this report.

Anecdotal data for the individual students follows:

Student 1: Student 1 came into the program in the last month of school. The second grade teacher was having trouble with the child in that he refused to do any assignments and paid little attention to what was going on in the classroom. The teacher also conveyed that his mother was having problems with him at home. His performance in the special class indicated that he was a good student and responded well to the point system and individual programming. The recommendation for the child is that he returns to regular program the next academic year. Because of the short period of time in which he was in the special class no pre- and post-academic tests were taken.

Table I

Hill Walker Behavior Problem Checklist Scores

Student		Acting Out	Withdrawal	Distractability	Disturbed Peer Relations	Immaturity	Total Score
1	Month	4 5	4 5	4 5	4 5	4 5	4 5
	Score	8 2	0 0	9 2	3 3	2 0	22 7
2	Month	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5
	Score	9 6 3	0 0 0	9 5 4	9 5 4	0 0 0	27 16 11
3	Month	9 3 4 5	9 3 4 5	9 3 4 5	9 3 4 5	9 3 4 5	9 3 4 5
	Score	0 1 1 1	10 14 9 9	9 5 3 3	8 4 4 4	0 7 6 6	27 31 23 23
4	Month	3 4 5 6	3 4 5 6	3 4 5 6	3 4 5 6	3 4 5 6	3 4 5 6
	Score	7 6 6 3	0 0 0 0	2 6 6 11	1 0 0 0	1 4 4 0	11 14 14 14
5	Month	9 3 4 5	9 3 4 5	9 3 4 5	9 3 4 5	9 3 4 5	9 3 4 5
	Score	0 1 1 1	1 10 4 4	1 1 1 0	0 0 0 0	0 0 0 0	2 12 6 5
6	Month	10 3 4 5 6 6	10 3 4 5 6 6	10 3 4 5 6 6	10 3 4 5 6 6	10 3 4 5 6 6	10 3 4 5 6 6
	Score	13 12 12 9 9 1	0 0 0 0 0 0	10 4 4 2 4 3	1 1 1 1 1 0	2 2 2 2 2 0	26 19 19 14 16 4
7	Month	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5	3 4 5
	Score	12 10 9	0 0 0	8 7 5	3 3 3	1 1 1	24 21 18

The Hill-Walker Behavior Problem Checklist scores indicate a dramatic drop. A low score on the Hill-Walker Behavior Problem Checklist indicates less behavior problems than a higher score. Figure I shows a record of the number of times the child indicated that he could not do a task, or did not know how. Baseline was taken from the period May 1 through May 5 and then the child was put on an ignoring program which successfully deleted the behavior.

Student 2: Student 2 came into the special class in March. He spent one school year at Children's Hospital school and after being recommended to enter a first grade class, which he did, met with little success. He apparently could not function within such a large group. Although he was unable in the first grade class to spend a full day in school, he did go a full day in the special class and seemed to respond well to the attention and the individualized programming.

Aberrant behaviors which were pinpointed were hitting of other children and talk-outs. The graphs presented by the teacher of the special class indicated essentially no progress in the program to reduce the number of times he hit other children; the number of talk-outs reduced gradually in the period May 3 to June 5, although even by June 5 they were not completely eliminated. The average number of talk-outs exhibited by the child between the period April 3 and April 10 was four. The number of talk-outs between the period May 26 and June 5 was 0.5. No pretest was done on the Gates-McKillop Test although a posttest was accomplished on June 7. In the period between March 16 and May 17 on a Math Inventory test, the student indicated some improvement in almost all areas. This child will be retained in the class next academic year.

Student 3: An examination of the results of the Hill-Walker Behavior Problem Checklist for student 3, who has been in the program since its inception in September, indicates that he has made relatively little gains according to the Hill-Walker Behavior Problem Checklist. An effort was made by the teacher to reduce the number of times the child cried in a day. From the period March 13 to March 17 he was crying on an average of three times a day. This was reduced to an average of 0.25 in the period April 11 through April 14. In the period from April 18 to May 25 the teacher was able to have the child accomplish more tasks without asking for assistance, whereas at the beginning of the period he required teacher's assistance in three out of every four tasks he would undertake. The data on an informal Reading Inventory indicates that the child learned to read to a much greater extent than when he started the program. These type of gains are not demonstrated in the Math Inventory on tests which were administered in September and May. This child will be retained in the program for another academic year, although it is hoped that he will begin to be phased into a regular program.

Student 4: Student 4 was in the program from its inception in September. He is being phased back into the regular classroom and the comments of the regular classroom teacher are worth noting:

> After spring vacation, ___ came back to our room for math class and later spent most of the afternoon with the third grade.
>
> Most of the time he was a good worker. Though he was still easily distracted, for the

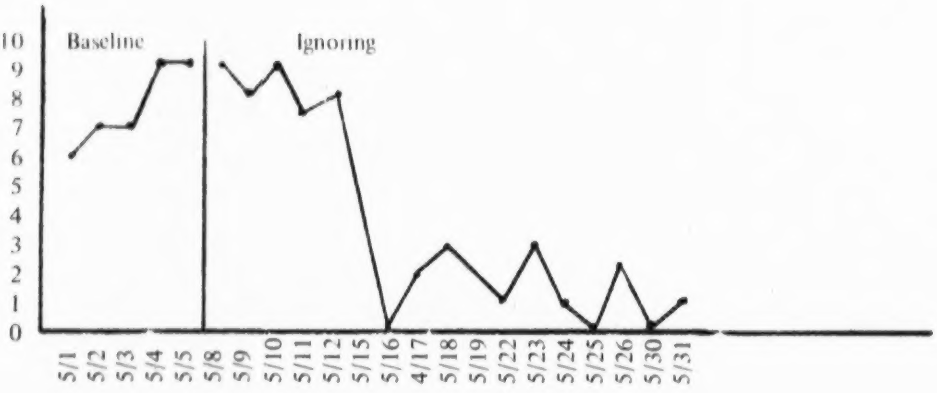


Figure 1

Student 1 – Record of number of times he said, "I can't do it," or "I don't know how."

> most part he stayed at a task with only occasional reminders. He seemed to try hard to exhibit accepted classroom behavior and was eager and anxious to complete his assigned work. He showed that he was working on self-control, very seldom talking or acting out. He wanted very much to be a part of the group.
>
> If he were given explicit directions, he could do the mathematical computations with the help of a number line or counting.
>
> He had difficulty with reasoning situations and problem solving even on a one-to-one oral basis.
>
> I believe he has made progress in both his arithmetic skills and his social classroom behavior.

The average number of talk-outs from the period April 10 to April 28 was 2.5, as opposed to the baseline period of 10. The program for reducing the talk-outs was having the child count his own and keep track of them on his desk.

His correct and error rate as demonstrated in the Reading Inventory is shown in Table II.

Student 5: This student was in the program for the entire year. An examination of the Hill-Walker Behavior Problem Checklist indicates that the main difficulty which the child apparently has was withdrawal from others. According to the teacher this has largely been overcome, although the child is still needful of teacher's approval. Figure 2 shows the effect of a structured program on reduction of having the child ask for teacher approval. This child's academic performance progressed satisfactorily during the year.

Student 6: As evidenced by the scores of the Hill-Walker Behavior Problem Checklist over the period from October to June, the student made good advances in his behavior. These advances are supported by the comments of the classroom teacher and are reported in part as follows:

> In the afternoon workshop it is obvious that his work habits have improved greatly. He listens to directions and does his work quietly. He makes an attempt to do an assignment whether it is difficult or not. One of his problems was to keep his hands to himself, particularly in the P.E. class, where many children were involved. He has been able to enter into this class with no problems at all. In fact I observed him trying to settle one disagreement. In my opinion, the (special) class has been a life-saver to him. He is happier, eager to learn and not so defeated. He found he could do something.

This child will be returning to a regular third grade class next year.

The only academic data submitted to support this child's growth was Math Inventory I and II which was only partly completed. The growth indicated no change in the correct-error ratio but a significant increase in the number of correct responses. The dates of the two tests were January 11 to 15, and May 16 to 18.

Student 7: As is obvious from the Hill-Walker Behavior Problem Checklist scores in Table I, this child has exhibited relatively little improvement in his performance, although some gains apparently have been made in acting out and in distractability, which may be due to a medication program on which he has been placed.

In September this child had no reading skills, whereas in May he exhibited some reading skills as evidenced by a Reading Inventory record sheet. For instance, in the visual discrimination of letters over a two day period he was able to get 34 correct and 1 incorrect in a one minute period of time. His recognition of oral alphabet in the ten second period indicated only four correct and two incorrect. In a one minute period he was able to give 33 correct consonant sounds and 8 incorrect sounds. In a thirty second period he

Table II

Reading Inventory Record – Student 4

	Average 9/15, 9/16, 9/17 Correct	Incorrect	Average 5/22, 5/23, 5/24 Correct	Incorrect
Visual Discrimination, Letters	24	0	34	0
Oral Alphabet, Total	20	1	23	0
Consonant Sound	36	3	67	0
Vowel Sounds	15	14	21	1
Blending	0	14	5	9
Irregular Word	0	13	16	8
Oral Reading	2	9	38	6

was able to give 17 vowel sounds correctly and 9 incorrectly. Despite this evidence of improvement, the teacher was quite concerned about his reading abilities and felt that this was a major priority on which she needed to work with him. For this reason he is being retained in the special class for another year. His behavior, of course, also indicates that he can use the special services. A good example of the improvement that was made, but the need for further improvement, is exhibited by Figure 3, which shows the number of outbursts he exhibited during the reading lessons each day. An outburst was defined as a loss of temper and verbal abuse of the teacher.

3. Conduct counseling sessions in individual work with the student and to assist in the development of positive behaviors. Work with regular teachers to help integrate students back into the classroom.

Anecdotal records were provided to indicate that such counseling sessions were established. However, these were overshadowed by the difficulty in the establishing of this class. The teacher appointed to the class left the class in the middle of the year, requiring that another teacher be obtained. In addition, the class was initially established in an area that caused definite space problems. It was not until after February when the class moved to a mobile trailer that adequate space was considered to be provided. The teacher who came into the class as a substitute for the original teacher had never taught a class for the emotionally disturbed before, although she did have experience in classes for the neurologically impaired. Plans are under way to have this teacher go to summer school to receive further training.

4. The goal is to successfully integrate students back

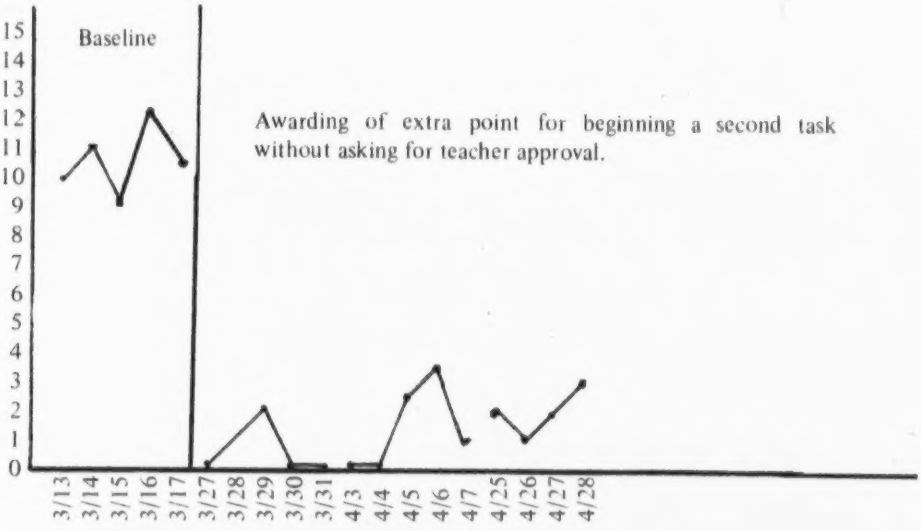


Figure 2

Student 5 – Reduction in muber of times Student 5 asks for teacher approval.

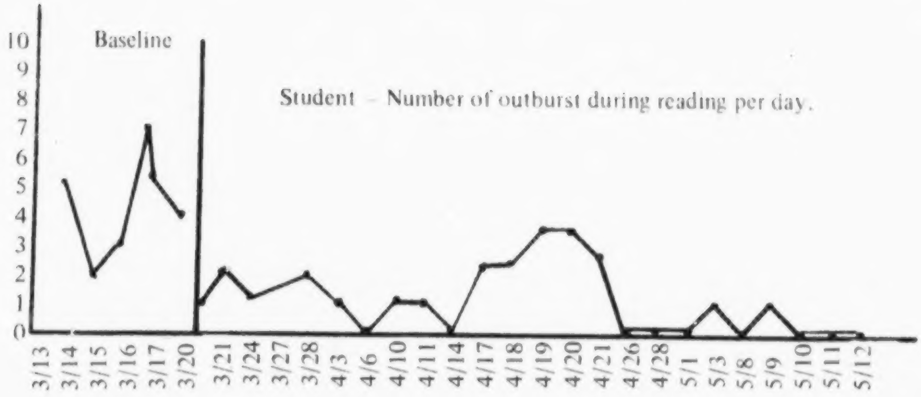


Figure 3

Ignoring outburst and leaving his desk, requiring him to complete one other task before teacher returned to him.

into the regular classroom.

The information for objective 4 has been cited in the write-up of objectives 1 and 2. Essentially four of the seven children are being returned to the regular class and in each case of those who are returning, the regular classroom teacher has indicated that the child is performing at a much higher level and in an acceptable manner to be retained in the particular classroom.

Third Party Evaluator's Comments:

This project had many difficulties in getting started but these difficulties abated beyond mid-year. The difficulties which the project had were mentioned in the "Result" section under objective 3. Briefly, the teacher who had been assigned to the project decided to leave the project in mid-year, leaving a substitute who had not been trained in behavior modification and who had never dealt with a class for behavior problems prior to this time. In addition, the space which the school district felt they were going to have – mainly mobile trailers, was not made available to them until after February.

Because of the change in teachers, some of the records were not transmitted as well as they should have been from one teacher to another, although it should be stated without qualification that the present teacher of the special class followed the evaluation plan exactly and kept all the necessary records to show the growth of the various students. Thus, in Table I one sees the Hill-Walker Behavior Problem Checklist being only systematically administered from the period March through the end of the project. The pre- and posttesting in the Gates-McGinitie or Gates-McKillop tests were not systematically done, although posttests on almost all children were administered. Thus, in some instances it was very difficult to discern the actual academic growth of the children and hopefully, these difficulties will be eliminated next year since the project has been refunded.

Another cause of concern, however, must be the number of children served by the project. The project was funded under the assumption that fifteen children, ages 6 to 12 would be served. Only 7 were served and of these only 4 were served for the entire school year. Undoubtedly, this failure to serve the number of children specified in the grant is due to space limitations and to the staffing difficulties which the project had.

Despite these inherent difficulties, one must be impressed with the gains made in the children. Of the seven children involved in the project, four are returning to the regular classroom and the reports from the regular classroom indicate significant improvement in their behavior to the extent where they will be able to satisfactorily perform without special assistance.

Title of Project:	*Speech Instruction and Clinic*
Location:	*Forest Grove Public Elementary Schools*
Funding Allocated:	*$11,762*
Type and Number of Children Served:	*40 Speech Correction, 71 Language Development, 111 Total*
Project Beginning Date:	*August 30, 1971*
Project Ending Date:	*June 9, 1972*

Background and Rationale:

Prior to September, 1971 the Forest Grove School District did not employ a speech clinician or have a planned speech therapy program in their elementary schools.

In the spring of 1971, referrals from elementary teachers indicated a possibility of 174 children who had some degree of articulation, voice or fluency problem. Referrals of children who needed language development programs numbered 42.

The great number of children requiring speech and language services indicated the need for instituting this project. Since there had been only minimal exposure to speech services in the elementary schools, there was the necessity of educating teachers and administrators to the rationale and operation of this new speech and language program.

Objectives and Evaluation Plan:

1. *To provide consultative services for home room teachers in classroom intervention techniques for pupils with speech and language problems.*

   To evaluate this objective, a log was kept concerning the number of these meetings, the number of teachers at these meetings, the number of students served, and the techniques presented. In addition, follow-up visits will be described in terms of techniques actually implemented by the teachers in their classrooms.

2. *To provide services for individual pupils with language and articulation problems.*

   To evaluate this objective the Northwestern Syntax Screening Test was administered on a pre- posttest basis and a modification of the Ryan Articulation Test was administered on a pre-post basis.

3. *To provide services for individual students diagnosed as having problems in phonation.*

   To evaluate this objective, the number of children served for this type of disability was documented. The type of services provided for them and the results of these services will be presented.

4. *To provide services for individual students diagnosed as having problems in prosody.*

   To evaluate this objective, the number of children identified as having this problem were presented. The type of program given to them and the results of this program were presented.

Methodology:

At the end of the school year 1971, all elementary teachers in seven schools had been asked to refer children for speech therapy and/or language development. A simple guideline was provided to help the teachers choose these students for referral.

In September, 1971, one full time speech clinician and one teacher aide (working 4½ hours daily) were employed to start this new speech program in the elementary grades (K-6).

The third week in September, 1971, speech screening was begun with those children who had been referred the previous spring. Ryan's Articulation Test was used for this pretest. Screening for those children needing services in the area of phonation and stuttering was also started at this time. Observation, an oral exam and a tape recording of the child's voice and speech were used as part of the diagnostic examination. Language screening was begun at the completion of the speech screening. The Northwestern Syntax Screening Test was used to evaluate those kindergarten, first and second graders who had been referred for language development. Teachers were encouraged to refer new students who had not been evaluated previously.

After the screening pretests were completed, the speech therapy and language development case loads were determined. The speech therapy cases were chosen on the basis of the following criteria:

1. Severity was not the sole factor in determining the cases chosen.
2. The total child, his environment, prognosis and etiology were considered in the selection.
3. Concentration of effort was placed on kindergarten and grades 1 and 2 with approximately 50% of the time spent by project personnel in this area.

4. Pupils with speech problems in grades 3-6 received approximately 30% of the instructional time.

Selection of language development cases were based on the following criteria:

1. Only kindergarten and grades 1 and 2 students were included.
2. Those K-2 pupils who scored below the 50th percentile in either receptive or expressive skills of the Northwestern Syntax Screening Test were considered.
3. Groups were limited to 10 students.
4. Scheduling and physical space available were also factors.

A separate schedule was made for the language development and for the speech therapy cases with some students included in both schedules. A block schedule of half-hour classes on Monday, Wednesday and Friday was used for the language development program. It was planned that two neighboring schools be used for the initial first and third block sessions of six to seven weeks with another group of schools having the second and fourth blocks. Language development was taught with the use of the Distar Language I kit.

Speech therapy cases were scheduled independently and were seen throughout the entire year in all schools. Each child was seen twice a week (Tuesdays and Thursdays) for a 15-20 minute session. Ryan's Articulation Program was used extensively for the articulation cases. Ryan's Stuttering Program was also used. Those children needing further diagnosis were referred to other services. (See Table I.)

Parents of children who were selected for the initial case load were notified. A conference with the speech clinician and/or the student's home room teacher was scheduled with the parent to explain each individual program.

The principal of each school was given a notebook that contained the current case load from his school, those students placed on a waiting list for therapy, students who were referred to other special services and names of students who were found to have satisfactory speech. Also included were language and speech referral forms and several information sheets. These notebooks were revised by the speech clinician throughout the year.

The consultative services centered on a series of grade level staff meetings planned and directed by the speech clinician. These provided background information to teachers so that they understood the basic speech and language program and referral procedures for screening and diagnosis. Specific office hours of the speech clinician were given to all teachers and principals. However, the speech clinician made herself available to "on the spot" consultation whenever needed.

Results:

1. To provide consultative services for home room teachers in classroom intervention techniques for pupils with speech and language problems.

A series of three speech and language workshops were held on November 22, November 29 and December 6 for all kindergarten, first and second grade teachers involved in the Title VI speech project. The meetings took place in the District Office Board Room which was a central location. These one hour meetings were planned and directed by the speech clinician. A total of 23 teachers attended the first

Table I

Student	Referral Made to Other Agencies Migrant Program	Washington County IED	Pacific University	Health Nurse or Family Physician	Tualatin Valley Guidance Clinic
1	X				
2	X	X			
3	X				
4		X			
5	X				
6	X				
7	X				
8	X				
9		X			
10		X			
11		X			
12		X			
13			X		
14				X	
15			X		
16			X		
17					X
18					X
19					X
20			X		
21				X	
TOTAL	7	6	4	2	3

meeting with an average of 21 teachers for the three meetings. (See Table II.) At one or more meetings the following were present: Mr. White, Assistant Superintendent; Mrs. McDowell, Director of Special Education; building principals; teachers not involved directly with the project; and student teachers.

Meeting Number 1. The first meeting began with an introduction and a display of materials by the speech clinician, Mrs. Lynetta Weswig. The background, rationale and an overview of the Title VI Speech Project were discussed. The teachers were exposed to a behavioral definition of normal speech and language development followed by audio tapes which contained examples of articulation, language, voice and fluency problems. Each tape was played two times with no explanation of the particular problem given the first time. The second time discussion was initiated around the characteristics of each problem. A simple articulation word sheet, check list and guideline was passed out and explained to the group. A list containing "Landmarks of Speech and Language" was also distributed and discussed. Other handouts included: Emmett Albert Betts, "Maturity Scale"; Dr. Charles Von Riper, "Exercises for Identifying and Practicing Isolated Speech Sounds"; and Virginia Danzer, "Speech Improvement in the Classroom."

Priorities for the speech clinician's case load and waiting

Table II

Attendance of Teachers at
Speech Instruction and Clinic Workshop

Teacher	Language Development Students	Speech Students	Meetings Attendance		
			1	2	3
School 1					
First Grade	4			X	X
Second Grade	2	3			X
School 2					
Kindergarten	12		X	X	X
First Grade		1	X	X	X
First Grade	1	2			X
Second Grade	3		X	X	X
Second Grade	5	1	X	X	X
School 3					
Kindergarten	2	1	X	X	
Kindergarten	10		X	X	X
First Grade	4		X	X	X
First Grade			X		X
First Grade	1	1	X	X	
Second Grade	5	2	X	X	X
Second Grade	4		X	X	
Second Grade		1	X	X	X
School 4					
Kindergarten	9		X	X	X
Kindergarten	5		X	X	X
First Grade	3		X	X	X
First Grade		2	X	X	X
First Grade	1	1	X	X	
Second Grade		2	X	X	X
Second Grade	2	2	X	X	
Second Grade	2	1	X	X	
Others			3	2	1
TOTALS	75	20	23	22	18

list were discussed. Schedules of the Language Development Block Program and Speech Therapy Program were then given to each teacher with an explanation and discussion of how the scheduling would be implemented.

The first workshop ended with a written evaluation by the teachers and a list of topics that they wanted to discuss in the following two workshops. A summary of the evaluations indicated that 19 of the 20 teachers understood the five major points of discussion. One teacher did not feel the Block Language Program was clearly explained. Six teachers commented on their special interest in the developmental sequence of sound production. Others found the topics of following directions, classroom materials and tests used to screen the youngsters to be of special interest. Three teachers commented that all areas discussed were of special interest. When asked for topics which they would like discussed further, 19 checked listening skills, 18 – increasing attention span, 7 – speech correction, 1 – language development (Distar) and 3 – techniques of speech improvement.

Meeting Number 2. Based on the evaluation of the first meeting, the second workshop was centered on listening skills and increasing attention span. The teachers were separated into four groups. The following topics were discussed for a 25 minute period:

a. What listening skills should your student have?
b. What can a teacher do to help children grow in the ability to listen?
c. How can a teacher evaluate her/his students' listening ability?
d. What can the teacher do to motivate children and increase their attention span?

A total group discussion followed the small groups. From these ideas were written, typed and distributed to the teachers at the following meeting. Other handouts included: "Suggestions for Teaching Listening"; "Level or Types of Listening"; and "Listening Classifications."

Meeting Number 3. Again based on the evaluation of the first meeting, the third meeting was centered on speech improvement in the classroom. A copy of "Five Steps to Speech Improvement in the Primary Grades" by Dr. Robert English was distributed to all teachers. Each of the five steps listed in the handout was explained with demonstrations of various techniques being given by the speech clinician.

Next, the Speech Therapy Program was discussed with emphasis on articulation, voice and fluency problems. The clinician demonstrated diagnostic procedures as well as Ryan's programmed method of speech correction. A tape was played and a brief demonstration was given for the Distar method for teaching language. Once again the Block Language Program was explained and discussed.

In conclusion, the teachers were asked to fill out a second evaluation of the workshop. Nine of the sixteen replies favored a follow-up meeting later in the year. Thirteen replies stated that the teacher would be able to begin a speech improvement program in her classroom. Most teachers listed the following as benefits gained from the speech and language workshops: (1) an understanding of the Title VI-A speech program; (2) a better understanding of what can be done in the classroom to help develop speech and language; (3) a view of speech and language materials available; and (4) a knowledge of ways to detect speech and language difficulties.

Follow-up visits by the speech clinician to observe speech techniques used by the teachers in their classrooms were initiated on a non-scheduled basis during the school year. The following techniques were observed being used by one or more teachers:

a. Referring students for speech and language with the help of check lists. Speech and language development programs were used in all schools and at all grade levels.
b. When referring, teachers were able to describe a sound in terms of it being omitted, substituted or distorted. Voice cases were described in terms of loudness, pitch and quality. Many speech terms were used in the teachers' vocabulary.
c. Kindergarten teachers were observed using the "positive approach" as used in the Distar Language Development Program. Students were rewarded for their new speech and language behaviors.
d. Many listening games were observed. One teacher decided to give directions only once. In time her children were able to follow instructions that were given only once. If repetitions were necessary, the teacher would call on good listeners in the class to relay the directions.
e. Students were praised and rewarded by the teacher and peers for correct use of their "speech sound" in reading circles.
f. Teachers used listening stories from Weekly Reader and Peabody Kits.

2. To provide services for individual pupils with language and articulation problems.

Results of the children involved in the Distar Language Program are reported in Tables III and IV.

The data found in the charts are representative of the results of articulation training with thirty-one students. The percentage figures were derived by taking samples of the child's production of sounds in the various conditions described and computing the average percentage of correct responses that the child emitted. In addition, data were collected daily on the child's ability to produce the sounds. Graphs were made of the percentage of correct responses for each session that each child was engaged in therapy.

3. To provide services for individual students diagnosed as having problems in phonation.

No children were diagnosed as needing direct therapy for phonation problems. Two students were referred to their

Table III

Northwestern Syntax Screening Test Results
Language Development Blocks I and III

Child	Pretest (11-71)		Posttest (4-72)		Difference	
	Receptive	Expressive	Receptive	Expressive	Receptive	Expressive
Kindergarten						
1	12	5	12	14	0	+9
2	28	32	37	38	+9	+6
3	24	11	31	17	+7	+6
4	34	33	37	35	+3	+2
5	10	3	18	6	+8	+3
6	24	21	21	27	-3	+6
7	0	0	20	20	+20	+20
8	16	23	23	28	+7	+5
9	23	26	33	33	+10	+7
10	0	0	26	26	+26	+26
First Graders						
1	21	24	37	37	+16	+13
2	29	23	28	29	-1	+6
3	19	9	25	11	+6	+2
4	24	23	29	29	+5	+6
5	34	30	37	37	+3	+7
6	16	26	36	37	+20	+11
Second Graders						
1	36	37	36	37	0	0
2	30	33	39	36	+9	+3
3	39	32	38	37	-1	+5
4	33	17	34	32	+1	+15
5	36	36	38	40	+2	+4
6	24	30	33	38	+9	+8
7	34	33	38	37	+4	+4
8	23	29	35	34	+12	+5
9	31	29	36	34	+5	+5
10	31	35	34	32	+3	-3
11	38	34	39	32	+1	-2
12	28	34	32	38	+4	+4
13	38	32	39	40	+1	+8
14	30	38	37	38	+7	0

physicians or some other source for further diagnosis. However, these students were not enrolled in the speech therapy program.

4. To provide services for individual students diagnosed as having problems in prosody.

Three students were enrolled in therapy because of stuttering problems. The following is a description of the program presented and the results of the therapy with each of these three students.

Child 1. This child was referred late in the school year. Counseling sessions were conducted with the child's teacher. Suggestions were given for working with the parent and in making the speaking situation more tolerable for the child in the classroom. No results were reported on the effect of this program.

Child 2. This child was not able to be scheduled into the regular speech therapy program. Consequently, the child was referred for language development and remedial reading. Distar Language I was used as the language development program. The child was able to participate and respond in group and individual conditions for short, predictable answers with 100% fluency by the end of the year.

Child 3. This child was evaluated in September, 1971 as having second phase stuttering characteristics. Baseline data showed that he had 19 stuttered words per minute in reading and 27 stuttered words per minute in conversation. A modified Ryan's Stuttering Program was used as a

Table IV

Northwestern Syntax Screening Test
Language Development Blocks II and IV

	Pretest (1-72)		Posttest (5-72)		Difference	
Child	Receptive	Expressive	Receptive	Expressive	Receptive	Expressive
			Kindergarten			
1	0	0	24	6	+24	+6
2	22	12	28	30	+6	+18
3	23	24	30	30	+7	+6
4	27	23	30	31	+3	+8
5	27	30	35	32	+8	+2
6	28	24	30	35	+2	+9
7	18	1	19	11	+1	+10
8	23	22	31	27	+8	+5
9	27	26	37	36	+10	+10
10	16	25	30	36	+14	+11
11	21	19	32	33	+11	+14
12	19	25	24	29	+5	+4
13	26	20	32	34	+6	+14
14	34	27	34	33	0	+6
15	26	26				
16			27	31		
17			30	34		
18			32	34		
			First Graders			
1	30	25	35	34	+5	+9
2	21	19	36	34	+15	+15
3	32	31	38	37	+6	+6
4	35	27	37	38	+2	+11
5	30	32	34	35	+4	+4
6	28	34	34	38	+6	+4
7	32	35	33	35	+1	0
			Second Graders			
1	31	36	36	30	+5	-6
2	35	32	34	37	-1	+5
3	34	34	35	32	+1	-2
4	34	34	35	36	+1	+2
5			33	36		
6			38	37		

guideline for therapy. The child completed the established reading phase. (36 fifteen minute sessions, a total of eight hours.) The child then moved into the monolog phase. Last data collected showed that the child has two stuttered words per minute in reading and eight stuttered words per minute in conversation. The observations and resulting data were taken in the therapy sessions only. Consequently, there is no information which indicates that the behavior changes were maintained in any other environmental setting.

Subjective Results:

In addition to the objective data which represent the effects of this speech therapy program, fifteen teachers and principals from elementary schools in the Forest Grove School District sent letters to the Director of Special Services and the speech clinician which indicated their support and approval of the speech therapy program that was conducted in their school during the school year 1971-72. Each teacher indicated that parents of their students also supported the program and were pleased with the progress that the children had made in the various speech and language programs conducted by the speech clinician.

Third Party Evaluator's Comments:

Upon reviewing the data reported for this project, the

Chart 1

Ryan's Pre- Posttest Results

Student 1 Total Hrs. of Therapy: 1¼ hrs. 5 sessions
Sound(s) Being Corrected: /s/

	Pretest	Posttest
Produced Sound	40%	94%
Used Sound in Syllables	43%	95%
Used Sound in Words	40%	89%
Used Sound in Sentences	45%	60%
Used Sound in Conversation	40%	42%

*Additional Comments: This student also worked on eye contact and listening skills.

Chart 2

Ryan's Pre- Posttest Results

Student 2 Total Hrs. of Therapy: 10 hrs. 40 sessions
Sound(s) Being Corrected: /s/, started /r/

	Pretest	Posttest
Produced Sound	Could not produce sound (th/s)	100%
Used Sound Syllables	Could not produce sound	100%
Used Sound in Words	Could not produce sound	100%
Used Sound in Sentences	Could not produce sound	83%
Used Sound in Conversation 2 minute unstimulated conversation	Could not produce sound	100%

*Additional Comments: In phrases the student was able to produce the /s/ sound with 90% accuracy. The /r/ was still in the evocation stage with 85% accuracy.

Chart 3

Ryan's Pre- Posttest Results

Student 3 Total Hrs. of Therapy: 6¼ hrs. 25 sessions
Sound(s) Being Corrected: /r/ initial, medial stressed, unstressed

	Pretest	Posttest
Produce Sound	Unable to produce sound (any position)	100% (all positions)
Used Sound in Syllables	Unable to produce sound	100%
Used Sound in Words	Unable to produce sound	90%
Used Sound in Sentences	Unable to produce sound	85%
Used Sound in Conversation 2 minute stimulated conversation	Unable to produce sound	100%

*Additional Comments: This student also had 92% accuracy of the /r/ in blends. He also corrected a f/th substitution with 100% accuracy in a 2 minute conversation.

Chart 4

Ryan's Pre- Posttest Results

Student 4 Total Hrs. of Therapy: 6½ hrs. 26 sessions
Sound(s) Being Corrected: 3½ hrs. /r/ 4 hrs. /s/

	Pretest	Posttest		
	/r/	/s/	/r/	/s/
Produced Sound	Could not produce sound	100%	87%	100%
Used Sound in Syllables		60%	65%	100%
Used Sound in Words	Could not produce sound	85%	95%	100%
Used Sound in Sentences		75%		100%
Used Sound in Conversation 2 minute unstimulated conversation		60%		100%

Chart 5

Ryan's Pre- Posttest Results.

Student 5 Total Hrs. of Therapy: 6½ hrs. 26 sessions
Sound(s) Being Corrected: /th/ voiced and voiceless

	Pretest	Posttest
Produced Sound	85%	100%
Used Sound in Syllables	80%	100%
Used Sound in Words	83%	100%
Used Sound in Sentences	50%	90%
Used Sound in Conversation	Not tested	90%

*Additional Comments: This child was able to use this sound in reading with 95% accuracy. He was able to recognize the sound in discrimination games with 95% accuracy. The /l/ sound was also worked on.

Chart 6

Ryan's Pre- Posttest Results

Student 6 Total Hrs. of Therapy: 8 hrs. 32 sessions
Sound(s) Being Corrected: /s/

	Pretest	Posttest
Produced Sound	60%	100%
Used Sound in Syllables	40%	100%
Used Sound in Words	60%	100%
Used Sound in Sentences	20%	100%
Used Sound in Conversation 2 minute conversation	Not tested	90%

*Additional Comments: This student needed more carry-over into the classroom and home situations.

Chart 7

Ryan's Pre- Posttest Results

Student 7 Total Hrs. of Therapy: 1½ hrs. 6 sessions
Sound(s) Being Corrected: /r/

	Pretest	Posttest
Produce Sound	Could not produce sound (in isolation)	80%
Used Sound in Syllables	Could not produce sound	30% (initial position)
Used Sound in Words	Could not produce sound	Could not produce sound
Used Sound in Sentences	Could not produce sound	Could not produce sound
Used Sound in Conversation	Could not produce sound	Could not produce sound

*Additional Comments: Much time was spent building a "raport" with this child. He was very shy and unwilling to take part in speech activities. My first task was to get him to speak in an audible voice.

Chart 8

Ryan's Pre- Posttest Results

Student 8 Total Hrs. of Therapy: 7 hrs. 28 sessions
Sound(s) Being Corrected: /r/ initial, medial stressed, unstressed

	Pretest				Posttest			
	/r/	/r/	/ɚ/	/ɝ/	/r/	/r/	/ɚ/	/ɝ/
Produced Sound	80%	could	not		100%	100%	100%	100%
Used Sound in Syllables	0%	not make	tested		80%	- -	100%	60%
Used Sound in Words	40%	sound in	not tested		60%	80%	100%	100%
Used Sound in Sentences	50%	words	not tested		100%	80%	100%	100%
Used Sound in Conversation	50%		not tested		90%	80%	100%	100%

*Additional Comments: This student had very little carry-over into the classroom but did very well in the Speech Therapy setting.

Chart 9

Ryan's Pre- Posttest Results

Student 9 Total Hrs. of Therapy: 7¾ hrs. 31 sessions
Sound(s) Being Corrected: /r/ all positions

	Pretest	Posttest
Produced Sound	20%	100%
Used Sound in Syllables	20%	100%
Used Sound in Words	40%	100%
Used Sound in Sentences	20%	100%
Used Sound in Conversation	15%	95%

*Additional Comments: This student still has trouble with the unstressed final / / attaining only 80% accuracy. This student also needs work on w/l substitution in all positions. This student also increased the volume of his voice while speaking in conversation.

Chart 10

Ryan's Pre- Posttest Results

Student 10 Total Hrs. of Therapy: 1 hr. 4 sessions
Sound(s) Being Corrected: /r/

	Pretest	Posttest
Produced Sound	95%	100%
Used Sound in Syllables	80%	100%
Used Sound in Words	90%	100%
Used Sound in Sentences	70%	100%
Used Sound in Conversation	Not tested	90%

*Additional Comments: This student was dismissed with periodic checkups. He had no other articulation errors.

Chart 11

Ryan's Pre- Posttest Results

Student 11 Total Hrs. of Therapy: 5¾ hrs. 23 sessions
Sound(s) Being Corrected: Final Consonants: /t/ /d/ /k/

	Pretest	Posttest
Produced Sound	100%	100%
Used Sound in Syllables	100%	100%
Used Sound in Words	100%	100%
Used Sound in Sentences	50%	95%
Used Sound in Conversation 2 minute with conscious effort	60%	77%

Chart 12

Ryan's Pre- Posttest Results

Student 12 Total Hrs. of Therapy: ¼hr. 1 session
Sound(s) Being Corrected: w/r, th/z, s tongue thrust

	Pretest	Posttest
Produced Sound	Could not produce sound	90% (with stimulation)
Used Sound in Syllables	Could not produce sound	
Used Sound in Words	Could not produce sound	
Used Sound in Sentences	Could not produce sound	
Used Sound in Conversation	Could not produce sound	

*Additional Comments: We had a schedule conflict for this student and we were unable to continue therapy.

Chart 13

Ryan's Pre- Posttest Results

Student 13 — Total Hrs. of Therapy: 5½ hrs. 22 sessions
Sound(s) Being Corrected: /r/ all positions
medial, initial, stressed, unstressed

	Pretest	Posttest			
	/r/ /r/ /ɚ/ /ɝ/	/r/	/r/	/ɚ/	/ɝ/
Produced Sound	Could not	100%	100%	100%	100%
Used Sound in Syllables	produce sound	100%	100%	100%	80%
Used Sound in Words					
Initial	Could not	100%	100%	100%	100%
Medial	produce sound	100%	100%	100%	70%
Used Sound in Sentences	Could not produce sound	90%	80%	100%	not tested
Used Sound in Conversation	Could not produce sound	100%	80%	100%	not tested

Chart 14

Ryan's Pre- Posttest Results

Student 14 — Total Hrs. of Therapy: 3¼ hrs. 13 sessions
Sound(s) Being Corrected: /t/ /d/ final
consonants

	Pretest	Posttest
Produced Sound	100%	100%
Used Sound in Syllables	100%	100%
Used Sound in Words	100%	100%
Used Sound in Sentences	70%	98%
Used Sound in Conversation 2 minute stimulated conversation	50%	70%

*Additional Comments: This student also worked on slowing down his rate of speech.

Chart 15

Ryan's Pre- Posttest Results

Student 15 — Total Hrs. of Therapy: 1½ hrs. 5 sessions
Sound(s) Being Corrected: /r/ medial, /ɝ/
stressed

	Pretest	Posttest
Produced Sound	100%	100%
Used Sound in Syllables	100%	100%
Used Sound in Words	60%	90%
Used Sound in Sentences	60%	92%
Used Sound in Conversation	Not tested	80%

Chart 16

Ryan's Pre- Posttest Results

Student 16 — Total Hrs. of Therapy: 9 hrs. 36 sessions
Sound(s) Being Corrected: /s/

	Pretest	Posttest
Produced Sound	100%	100%
Used Sound in Syllables	60%	100%
Used Sound in Words	80%	100%
Used Sound in Sentences	50%	100%
Used Sound in Conversation 2 minute little or no stimulation	50%	100%

Chart 17

Ryan's Pre- Posttest Results

Student 17 — Total Hrs. of Therapy: 5¾ hrs. 23 sessions
Sound(s) Being Corrected: /th/ /l/

	Pretest	Posttest		
	/th/	/l/	/th/	/l/
Produced Sound	Substituted	98%	100%	100%
Used Sound in Syllables	d/th	Distorted	100%	100%
Used Sound in Words	consistently	Distorted	90%	90%
Used Sound in Sentences	Substituted	70%	80%	90%
Used Sound in Conversation	d/th consistently	Not tested	90%	90% (stimulated)

*Additional Comments: The student consistently made his d/th substitution only on the word "the."

Chart 18

Ryan's Pre- Posttest Results

Student 18 — Total Hrs. of Therapy: 7¾ hrs. 31 sessions
Sound(s) Being Corrected: /l/

	Pretest	Posttest
Produced Sound	Could not produce sound (in isolation)	100%
Used Sound in Syllables	Could not produce sound	100%
Used Sound in Words	Could not produce sound	100%
Used Sound in Phrases	Could not produce sound	70%
Used Sound in Sentences	Could not produce sound	60%
Used Sound in Conversation	Could not produce sound	50%

*Additional Comments: This child comes from a Spanish speaking home. He was receiving Language Development through the Migrant Program as well as special help in speech correction. This child substituted ch/sh, w/r, s/th, d/t, his conversational speech was almost unintelligible when he first came to therapy. Now his intelligibility of speech is fair.

Chart 19

Ryan's Pre- Posttest Results

Student 19 — Total Hrs. of Therapy: 3 hrs. 12 sessions
Sound(s) Being Corrected: /r/

	Pretest	Posttest
Produced Sound	Could not produce sound	85%
Used Sound in Syllables	Could not produce sound	Could not produce sound
Used Sound in Words	Could not produce sound	20%
Used Sound in Sentences	Could not produce sound	Could not produce sound
Used Sound in Conversation	Could not produce sound	Could not produce sound

Chart 20

Ryan's Pre- Posttest Results

Student 20 — Total Hrs. of Therapy: 8½ hrs. 34 sessions
Sound(s) Being Corrected: /r/ in all positions
initial, medial, stressed, unstressed

	Pretest	Posttest			
	/r/ /r/ /ɝ/ /ɚ/	/r/	/r/	/ɝ/	/ɚ/
Produced Sound	Could not produce sound	100%	100%	100%	100%
Used Sound in Syllables		100%	100%	100%	90%
Used Sound in Words	Could not produce sound	100%	100%	80%	80%
Used Sound in Sentences	Could not produce sound	90%	60%	--	80%
Used Sound in Conversation	Could not	60%	50%	--	--

*Additional Comments: This girl will start Tongue Thrust Therapy next year after having a thorough diagnostic test done.

Chart 21

Ryan's Pre- Posttest Results

Student 21 — Total Hrs. of Therapy: 4 hrs. 12 sessions
Sound(s) Being Corrected: /r/ initial, medial, stressed

	PretestPosttest					
	/r/	/r/	/ɝ/	/r/	/r/	/ɝ/
Produced Sound	75%	---	75%	100%	---	100%
Used Sound in Syllables	20%	---	none	100%	---	93%
Used Sound in Words	10%	none		90%	20%	95%
Used Sound in Sentences	---	none		100%	60%	---
Used Sound in Conversation 2 minute conversation	---	none		50%	---	---

Chart 22

Ryan's Pre- Posttest Results

Student 22 — Total Hrs. of Therapy: 2 hrs. 8 sessions
Sound(s) Being Corrected: /r/

	Pretest	Posttest
Produced Sound	95%	100%
Used Sound in Syllables	95%	100%
Used Sound in Words	82%	100%
Used Sound in Sentences	60%	100%
Used Sound in Conversation	40%	98%

Chart 23

Ryan's Pre- Posttest Results

Student 23 — Total Hrs. of Therapy: 1¼ hrs. 5 sessions
Sound(s) Being Corrected: /l/

	Pretest	Posttest
Produced Sound	100%	100%
Used Sound in Syllables	100%	100%
Used Sound in Words	80%	100%
Used Sound in Sentences	65%	100%
Used Sound in Conversation	40%	100%

*Additional Comments: This girl was dismissed after five sessions.

Chart 24

Ryan's Pre- Posttest Results

Student 24 — Total Hrs. of Therapy: 6 hrs. 24 sessions
Sound(s) Being Corrected: /th/ voiced and voiceless

	Pretest	Posttest
Produced Sound	100%	100%
Used Sound in Syllables	70%	100%
Used Sound in Words	66%	100%
Used Sound in Sentences	20%	80%
Used Sound in Conversation	10%	90%

Chart 25

Ryan's Pre- Posttest Results

Student 25 — Total Hrs. of Therapy: 5¾ hrs. 23 sessions
Sound(s) Being Corrected: /l/

	Pretest	Posttest
Produced Sound	70%	100%
Used Sound in Syllables	33%	100%
Used Sound in Words	70%	87%
Used Sound in Sentences	30%	70% (all positions)
Used Sound in Conversation	Omitted all final and 50% of medial sounds	

*Additional Comments: This student still needs many carry-over activities for the final /l/ in conversational speech.

Chart 26

Ryan's Pre- Posttest Results

Student 26 — **Total Hrs. of Therapy: 5¾ hrs. 23 sessions**
Sound(s) Being Corrected: /th/ voiced and voiceless

	Pretest	Posttest
Produced Sound (stimulation)	100%	100%
Used Sound in Syllables	100%	100%
Used Sound in Words	86%	100%
Used Sound in Sentences	50%	100%
Used Sound in Conversation 2 minute stimulated conversation	Not tested	95%

***Additional Comments:** This boy had many other articulation errors. We started with this sound to build his confidence and give him some success.

Chart 27

Ryan's Pre- Posttest Results

Student 27 — **Total Hrs. of Therapy: 5¼ hrs. 21 sessions**
Sound(s) Being Corrected: /th/, /s/

	Pretest	Posttest
Produce Sound	100%	100%
Used Sound in Syllables	73%	100%
Used Sound in Words	86%	100%
Used Sound in Sentences	60%	90%
Used Sound in Conversation	Not tested	100%

***Additional Comments:** This student has just begun the evocation program for the /s/ sound.

Chart 28

Ryan's Pre- Posttest Results

Student 28 — **Total Hrs. of Therapy: 7½ hrs. 30 sessions**
Sound(s) Being Corrected: /r/ medial, stressed, unstressed

	PretestPosttest					
	/r/	/ɝ/	/ɚ/	/r/	/ɝ/	/ɚ/
Produced Sound	Could	100%	---	100%	100%	---
Used Sound in Syllables	not	63%	---	100%	100%	---
Used Sound in Words	produce	40%	20%	100%	60%	100%
Used Sound in Sentences	in words	–	No	100%		80%
Used Sound in Conversation	"		produc- tion			50%

Chart 29

Ryan's Pre- Posttest Results

Student 29 — **Total Hrs. of Therapy: 8 hrs. 24 sessions**
Sound(s) Being Corrected: /r/ /sh/ /ch/ initial

	Pretest			Posttest		
	/r/	/sh/	/ch/	/r/	/sh/	/ch/
Produced Sound	100%	No sound		100%	100%	100%
Used Sound in Syllables	100%	No sound		100%	100%	100%
Used Sound in Words	40%	No sound		100%	100%	100%
Used Sound in Sentences	40%	No sound		100%	100%	---
Used Sound in Conversation	Not tested	No sound		100%	90%	85%

***Additional Comments:** This student was released from therapy in March on a monthly checkup basis. His teacher was very cooperative in helping this child in classroom carry-over activities.

Chart 30

Ryan's Pre- Posttest Results

Student 30 — **Total Hrs. of Therapy: 6½ hrs. 18 sessions**
Sound(s) Being Corrected: /r/ /l/ /s/ blends

	Pretest	Posttest			
	/r/ /l/	/s/	/r/	/l/	/s/
Produced Sound	No sound	100%	---	---	---
Used Sound in Syllables	No sound	100%	89%	---	---
Used Sound in Words	No sound	55%	93%	100%	100%
Used Sound in Sentences	No sound	could	86%	94%	90%
Used Sound in Conversation	No sound	not produce	---	---	---

***Additional Comments:** This student was a hard worker and made very good progress even though the scores of the pre- and posttests are not complete.

Chart 31

Ryan's Pre- Posttest Results

Student 31 — **Total Hrs. of Therapy: 10 hrs. 36 sessions**
Sound(s) Being Corrected: /s/ /z/ /t/ /d/ final consonants, /th/ voiced

	Pretest	Posttest		
	/th/	/s/	/th/	/s/
Produced Sound	100%	Distorted	100%	90%
Used Sound in Syllables	100%	Distorted	100%	89%
Used Sound in Words	73%	Distorted	100%	90%
Used Sound in Sentences	30%	Distorted	50%	80%
Used Sound in Conversation	Not tested		40%	73%

*Additional Comments: We worked on some other sounds such as /sh/, /ch/ and final consonants but had no pretest or posttest scores recorded.

third party evaluator believes that it is apparent that the objectives for in-service training, language and articulation were met.

The three speech and language workshops that were held for teachers were exceedingly beneficial to them and to the speech therapy program in general. This activity was particularly beneficial in view of the fact that the program was a new one to the district. The results of the information that was presented to the classroom teachers were that they were able to make accurate referrals to the speech clinician. These referrals enabled her to begin serving all children who had severe speech and language problems as early as possible in the school year. Further, having knowledge of speech and language problems allowed all teachers to monitor the child's progress on remedial programs in the classroom and provide reinforcement when correct responses were emitted by the child.

The data resulting from the Distar Language training and articulation therapy indicate that changes made in child behavior in relation to the time spent with each child was more than adequate. In addition, for the speech clinician to initiate an intensive language program is both unique and desirable for speech programs within the state of Oregon. It is in the language curriculum area that a speech clinician can benefit more children and teachers in the public school setting.

Objective 3 was not applicable in that no children were diagnosed as having voice problems nor enrolled in therapy.

Concerning the three students who were involved in stuttering therapy, data were not submitted for two of the three students. However, excellent progress was reported for the third child. Consequently, this objective was only partially achieved.

Finally, a comment should be made concerning the clinician who was responsible for this project. Overall, the project was directed and conducted in a very professional manner. Behavioral objectives were specified for each child. Sufficient data were taken to insure that professional decisions could be made regarding each child's progress and to insure that she could be accountable for change in speech and language behaviors in relation to time spent with each child.

Those desiring to initiate or improve their speech programs should look upon this project as a model for what can be done.

Title of Project: *Curriculum Reinforcement for EMR Students – Junior High*

Location: *Hermiston Junior High School, Hermiston, Oregon*

Type and Number of Children Served: *9 EMR Junior High School Students*

Funding Allocated: *$5,000*

Project Beginning Date: *August 23, 1971*

Project Ending Date: *June 2, 1972*

Background and Rationale:

Two years prior to the initiation of this Title VI project, the EMR class at the elementary level was placed in a large open classroom using team teaching concepts. EMR children were grouped with 75 children from regular classes instructed by three regular classroom teachers, an aide, and the EMR teacher. The Hermiston School District felt that the program had been successful because it had increased the understanding between EMR students and normal students. Therefore, it was decided to extend this type of programming into the Junior High School with the EMR students who had participated in the program at the elementary level.

At the junior high level, EMR students would be instructed in a self-contained classroom for part of the day and during other times they would attend classes with their normal peers. Also, during one period, a group of normal children would attend a class in the EMR room.

The purpose of this project was to integrate as much as possible the junior high EMR students into regular junior high programs at Hermiston Junior High School.

Objectives and Evaluation Plan:

1. *Normal students' acceptance of the mentally retarded children will increase.*

   To evaluate this objective, a sociogram was used.

2. *The competency of mentally retarded children will increase.*

   To evaluate this objective, the Iowa Test of Basic Skills, the Gates Primary Reading Test, and the Lions-Carnahan Developmental Reading Test were administered.

3. *The changing emphasis from a self-contained EMR class to integrating the children with regular classroom children will result in a more positive parental attitude toward the child in school.*

   To evaluate this objective, a questionnaire was sent to the parents of the EMR students at the beginning and conclusion of the project.

Methodology:

In order to implement the program at the junior high level, an intern teacher from Oregon College of Education was hired to assist the regular junior high EMR teacher. The intern's task was to accompany groups of EMR students to the regular classes and serve as an aide to the regular classroom teacher. While the intern teacher was with the EMR children in the regular classroom, the EMR teacher instructed the EMR children who were unable to function in the regular classroom setting. The intern teacher provided assistance to the EMR teacher when she worked in the special class with her, and to the regular classroom teacher when she took the EMR children into the regular class setting. Those children who worked in the regular classroom setting with the intern teacher were those EMR children who were most able to function in a regular class setting.

The EMR children who functioned in the regular classroom setting consisted of five students in the English class, three students in the math class, and the total group went to the regular social studies, science and P.E. classes. In addition, four boys from the EMR class went to shop classes and all the girls participated in the regular home economics program. The home economics and P.E. programs were conducted without the help of the intern teacher. Because the total EMR group participated in the social studies and science classes, both the EMR teacher and intern teacher attended these classes with the students and they functioned as the teacher for the children in these class settings.

In the English and math classes the EMR students attended classes with the slower students and at the semester break the intern teacher assumed complete responsibility for both of these classes. Therefore, the intern worked with both the slow group as well as the EMR children who came into this setting.

It was also arranged for the low reading group from the seventh grade to attend the EMR class and view *The Electric Company* on television with the EMR students. In addition, the regular math class and the EMR class exchanged classrooms during the math period. This was done in order to get the regular class children to feel more at ease when coming into the EMR class. It was felt this was needed, as many of the regular class children expressed the feeling that the special class was not a pleasant place to be.

Both the EMR teacher and the intern teacher met with the regular classroom teachers for the purpose of assisting them in planning for the EMR students that attended their classes. It was felt that these sessions were needed in order to provide continual assistance to the regular classroom teachers.

Results:

1. Normal students' acceptance of the mentally retarded children will increase.

This was measured by a sociogram. Table I indicates the results of the sociogram conducted in the regular classroom setting. Regular classroom children were asked to respond to questions concerning their feelings about working with EMR children on projects or having them participate in extracurricular activities with them. The favorable responses column indicates the number of favorable responses toward EMR students made by the regular classroom children and the unfavorable response column indicates the number of unfavorable responses made by the regular class students about the EMR students. Pre- and posttest differences on these two measures indicate that the normal students made a few more favorable responses about the EMR students at the end of the project than they did at the beginning. They also made fewer unfavorable responses toward the EMR students at the end of the project than they did at the beginning.

As indicated by the EMR teacher, she had hoped that there would be more favorable responses from the regular class students than were reported. The teacher felt that because of the fewer number of unfavorable responses it indicated that the EMR students were, to a slight degree, being more accepted and that they were being noticed and watched less than at the beginning of the year. She felt this was to be considered as a definite form of acceptance.

Furthermore, the EMR teacher felt that the EMR children were being accepted more in the regular classes as the year progressed. She indicated that at the first of the year they were called "MR's" and ridiculed and treated like "monkeys in a zoo." This type of response to the EMR children decreased during the year.

2. The competency of mentally retarded children will increase.

To evaluate this objective the Lions-Carnahan Developmental Reading Test, the Gates Primary Reading Test, and the Iowa Test of Basic Skills were administered on a pre- and posttest basis. Tables II-VI present selected results from the various subtests of the tests administered. Tables II-IV

Table I

Sociograms

	Pretest – Oct. 1971		Posttest – May, 1972		Difference	
Class	Favorable Responses	Unfavorable Responses	Favorable Responses	Unfavorable Responses	Favorable Difference	Unfavorable Difference
Boys Physical Education (4 EMR boys)	1	29	6	26	+5	-3
Girls Physical Education (5 EMR girls)	0	31	1	22	+1	-9
Girls Home Economics (5 EMR girls)	4	33	5	17	+1	-16
Boys Shop (4 EMR boys)	0	12				
Mathematics (3 EMR students)	5	29	6	28	+1	-1
English (5 EMR students)	5	28	2	30	-3	+2

present data taken from Lyons-Carnahan Developmental Reading Test and the Gates Primary Reading Test. The results of these tests indicate that minimal gains were acquired in the area of reading. In analyzing Tables II and IV it can be noted that the gains made were minimal and only one child made a half year's growth on any of the subtests, child 6 on the paragraph reading test. All other children made less growth and some even showed a decrease in scores.

Table V presents the arithmetic skills subtest from the Iowa Test and it can be seen that two subjects gained more than a year's growth in arithmetic skills, whereas the remainder of the group showed six months' growth or less and three subjects showed a decrease score in arithmetic skills. Table VI presents the map reading subtest of the Iowa Test and here it can be noted that four subjects showed a year or more growth in map reading skills and only one subject showed a decrease in this area.

Thus, the overall results of these tests indicate that the subjects showed a minimal amount of growth in the area of reading, but in the areas of arithmetic and map reading skills, as measured by the Iowa Test of Basic Skills, subjects showed a more overall growth pattern, with four subjects showing a year or more growth in the area of map reading.

3. ***The change in emphasis from a self-contained EMR class to integrating the children with regular classroom children will result in a more positive parental attitude toward the child in school.***

To evaluate this objective, a questionnaire was sent to the parents of the EMR students at the beginning and conclusion of the project. Table VII presents the results of the parental reaction to the program. The table shows the number of positive comments the parents made about the program in response to the questions listed down the left hand margin. It also lists the number of negative comments and the comments the parents gave that indicated they were uncertain about their feelings toward the program. It can be noted that eight parents responded on the pre-

Table II

Lyons – Carnahan Developmental Reading Tests
Test I – Word Recognition

Student	Pretest – Sept., 1971		Posttest – May, 1972		Difference	
	Tried	Correct	Tried	Correct	Tried	Correct
1	44	41	48	42	+ 4	+ 1
2	45	21	54	23	+ 9	+ 2
3	54	54	54	53	Same	- 1
4	54	49	54	52	Same	+ 2
5	26	22	41	34	+15	+12
6	54	47	54	47	Same	Same
7	54	52	54	53	Same	+ 1
8	54	50	54	49	Same	- 1
9	48	41	54	43	+ 6	+ 2

Table III

Gates Primary Reading Test
Word Recognition

Student	Pretest Sept., 1971 Grade Equivalent	Posttest May, 1972 Grade Equivalent	Difference Grade Equivalent
1	3.6	3.4	- .2
2	2.19	2.15	- .04
3	3.6	3.7**	+.1
4	3.3	3.6	+.3
5	2.77	3.2	+.43
6	3.6	3.3	- .3
7	3.6	3.7**	+.1
8	3.3	3.7**	+.4
9	2.86	3.3	+.44

**Top Scores

Table IV

Gates Primary Reading Test
Paragraph Reading

Student	Pretest Sept., 1971 Grade Equivalent	Posttest May, 1972 Grade Equivalent	Difference Grade Equivalent
1	4.1	3.2	- .9
2	2.15	2.33	+.18
3	4.4**	4.1	- .3
4	2.9	3.2	+.3
5	3.8	4.1	+.3
6	3.8	4.4**	+.6
7	4.4**	4.4**	Same
8	3.8	4.1	+.3
9	3.2	3.2	Same

**Top Scores

program questionnaire and nine parents responded to the post-program questionnaire. This makes the total results difficult to interpret but it can be noted that overall results indicate that parental attitude was changed very little as a result of the program.

Third Party Evaluator's Comments:

Examination of the results of this project indicate a variety of findings. Through the sociograms it can be noted that the regular students were making less unfavorable comments about the EMR students, which may indicate that the regular class students were becoming less aware that the EMR students were different. But, on the other hand, they were not willing to accept them into the regular programs as their normal peers.

Academic results indicate that those children who received the highest scores at the beginning of the year were retaining these high scores at the conclusion of the program. However, these students made very little growth, as indicated by the standardized tests. In other words, those students who acquired high scores on the pretest also received the high scores on the posttest, but they made very little progress from pretest to posttest. The students who showed the most progress from pretest to posttest were those students who received the lowest scores on the pretest. This is often noted in programs with students who

Table V

Iowa Tests of Basic Skills
Arithmetic Skills

Student	Pretest Oct., 1971 Grade Equivalent	Posttest May, 1972 Grade Equivalent	Difference Grade Equivalent
1	3.3	3.1	- .2
2	0.0	1.9	+1.9
3	3.6	3.4	- .2
4	3.4	4.1	+ .7
5	1.9	3.1	+1.2
6	3.7	3.3	- .4
7	4.1	4.2	+ .1
8	4.0	4.4	+ .4
9	2.4	3.0	+ .6

Table VI

Iowa Tests of Basic Skills
Map Reading

Student	Pretest Oct., 1971 Grade Equivalent	Posttest May, 1972 Grade Equivalent	Difference Grade Equivalent
1	2.2	3.3	+1.1
2	0.0	2.2	+2.2
3	3.0	4.0	+1.0
4	3.5	4.0	+ .5
5	1.9	1.9	Same
6	4.8	5.8	+1.0
7	4.5	5.0	+ .5
8	5.0	4.5	- .5
9	3.0	3.5	+ .5

Table VII

Parental Reaction to the Program

	Pre			Post			Difference		
Questions	Positive	Negative	Uncertain	Positive	Negative	Uncertain	Positive	Negative	Uncertain
Satisfied with Special Education Program	5	3	0	7	2	0	+2	-1	0
Child has discussed program	6	2	0	5	2	2	-1	0	+2
Feel child will be gaining more academic knowledge	7	0	1	6	1	2	-1	+1	+1
Feel child is adjusting to regular classes	6	0	2	6	1	2	0	+1	0
Feel child is making more friends in school	6	0	2	7	2	0	+1	+2	-2

Only 1 boy in Shop 2nd semester and in a different class.

are introduced to a new type of academic programming. Those students making the most progress are those who are the most deficient at the beginning.

Parental reactions to the program, as indicated by the questionnaire, suggests that little or no change was brought about as a result of the program.

In reviewing the overall philosophy of this project the district should be commended for its efforts in attempting to integrate EMR students into the regular classroom setting. This can be a most difficult task, especially at the junior high school level. In discussing this project with the junior high teacher, it was suggested that the district might explore the concept of setting up a resource room where she could be in charge of the children for certain periods of the day and during these periods she could plan and implement their academic programming. After these programs had been initiated in the EMR class the children could begin working in regular classrooms on their assignments. As they completed them they could return to the resource room for evaluation of their completed work and the assignment of further work. It was indicated by the EMR teacher that this concept might work; however, she felt that more acceptance by the regular teaching staff of EMR students was needed. She indicated that the classes in which the EMR children had had the most success were those classes in which the teacher was most accepting of the children. This is certainly a point to be emphasized if a district is planning to integrate EMR students from segregated classes back into the regular program. Special attention must be given to training the regular teaching staff to effectively deal with these children in the regular classroom setting.

Title of Project: *Change Student and Teacher's Behavior Through Behavior Modification*

Location: *Lake Oswego School District No. 7*

Type and Number of Children Served: *86 Emotionally Disturbed*

Funding Allocated: *$20,000*

Project Beginning Date: *July 1, 1971*

Project Ending Date: *June 30, 1972*

Background and Rationale:

The Lake Oswego School District has long been aware that they were not meeting the specific needs of some students. While the district had supported the principle of special education and had provided some programs (speech therapy, educably mentally retarded, trainable mentally retarded, extreme learning problems and gifted) no specific plans had been developed for the socially maladjusted/emotionally disturbed student. This project was the pilot effort to provide that service.

Objectives and Evaluation Plan:

1. ***Change the behavior of the socially maladjusted/emotionally disturbed elementary child so that he can function adequately in the regular classroom.***

   The Hill-Walker Behavior Problems Checklist will be used as a pre- and posttest instrument. In addition, baseline data was to be obtained for each child wherever feasible and the intervention procedure was to be documented and graphed for each behavior for each child.

2. ***Change the behavior of the classroom teacher so that she can change the behavior of the socially maladjusted/emotionally disturbed child so that he can function adequately in the regular classroom.***

   Teacher's behavior was to be graphed where feasible in addition to anecdotal records being kept on the teacher's performance.

3. ***Change the behavior of the parents of the socially maladjusted/emotionally disturbed child so that he can function adequately in society.***

   Observation of the parents' behavior in the home was not feasible in this project. However, anecdotal records were to be submitted.

Methodology:

A teacher-counselor, certified in Extreme Learning Problems and versed in the use of Behavior Modification was hired for this project. The procedure for referral and treatment was as follows:

a. Teachers filled out the Hill-Walker Behavior Problems Checklist when a student had behavior problems;
b. The teacher-consultant met with the teacher to specify those inappropriate behaviors which should be modified;
c. The teacher-consultant then entered the classroom and took baseline data on the observed behavior. Usually two ten minute observation periods were used to determine baseline. These observations were then plotted on a 6 cycle graph;
d. After baseline was established, the teacher-consultant and the classroom teacher met to determine a contingency program to modify the inappropriate behavior;
e. The teacher-consultant or his aide would then go into the classroom on a regular basis to collect data. These data were graphed;
f. Adjustments were made in the program when the data or observations warranted such adjustments. An adjustment was usually made in one of the following areas: (1) Academic program, (2) Teacher presentations or directions, and (3) Consequences;
g. In some cases additional observations were made to see if the program was maintaining. If not, additional adjustments were made and the process began again.

Results:

1. ***Change the behavior of the socially maladjusted/emotionally disturbed elementary child so that he can function adequately in the regular classroom.***

Thirty-one children were tested using this methodology on which data were kept and graphed. An example of the type of results achieved is shown in Figures 1 and 2. Of course, not all the programs achieved the same degree of success as these did. The third party evaluator, upon reviewing the data presented, discovered that improvement in behavior (either academic advancement or decrease in aberrant behavior) was noted in more than 85% of the

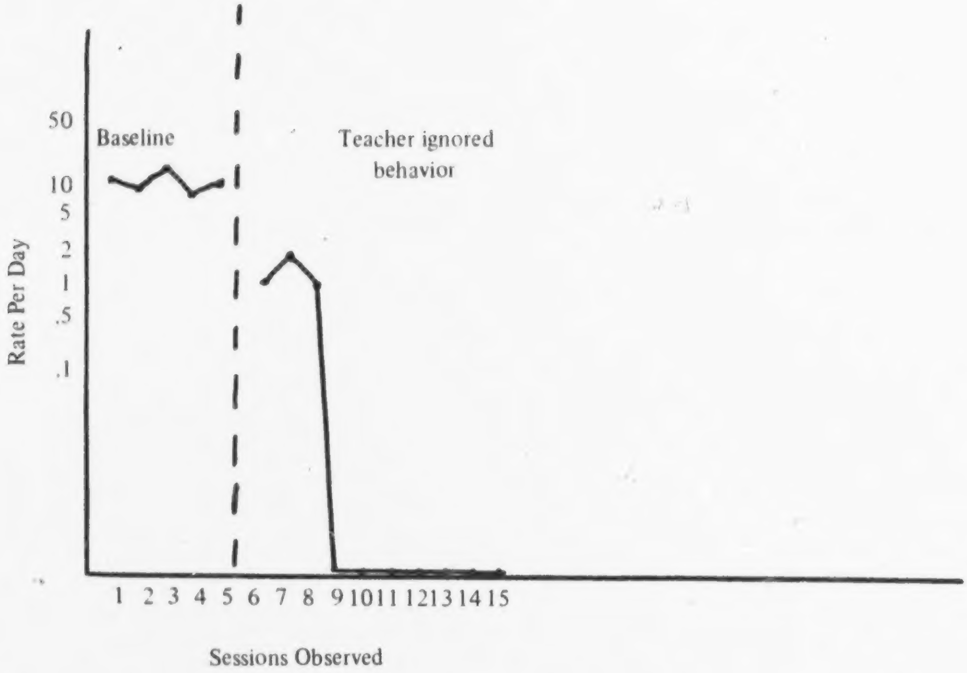


Figure 1. Program for a child falling out of his seat.

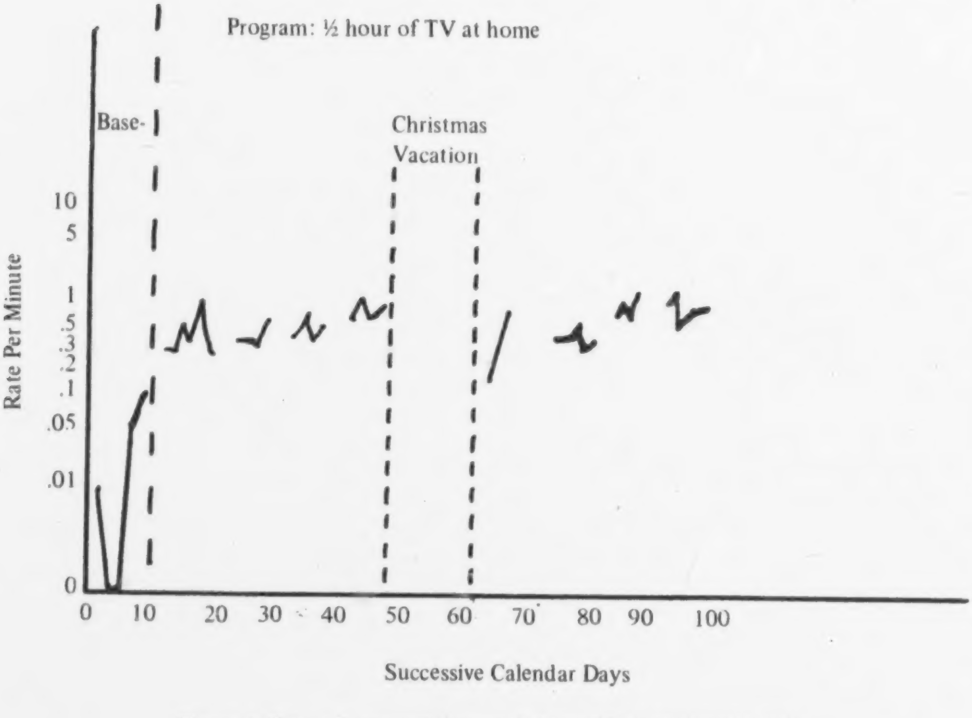


Figure 2. Rate of accomplishment Sullivan Math arithmetic task.

cases).

In addition to this graphed behavior, a rather detailed "behavioral report" was completed on each child. An example of the degree of specificity contained in each of these reports follows:

> N.B. was referred for some of the following reasons: (1) Out of seat; (2) Short attention span; (3) Disturbs other children; (4) Little or inappropriate response; (5) Does not complete work. The teacher reports, "His attention span is extremely short, this results in provoking of other children (poking, teasing, taking things, etc.). On the playground he chases, hits and simply 'bugs' the other children. When attempting academic work he will often verbalize the answers, words, etc.
>
> A program for modifying academic and social behavior was started. N.B. was receiving a more specific academic program with specific directions and consequences. At the same time three social behaviors were attempting to be modified. Talking out behavior had a baseline of .06 per minute and decreased to almost zero. This was attributed to a more specific program. Turning his head had a baseline of .4 per minute and decreased to approximately .3 per minute. It was found much of this behavior was determined by where he sat. It was found Miss C. had a high rate of attending to N.B. (baseline .6 per minute). Thus through awareness and specific programming this behavior was decreased to about .2 per minute. The teacher also decreased her negative verbal comments from baseline of .5 to approximately .1 per minute and positive verbal comments maintained a very good .9 per minute.

In addition to these 31 children, programs for 27 other children were inaugurated and carried out, but no data were maintained. Finally, for 28 other children observations were conducted, teachers were counseled, or testing of the child was accomplished. Complete programs for these children were not undertaken.

Of the 58 children who received extended behavior modification programs the teacher-counselor indicates that nine will require extensive programming during the next academic year, seventeen will need periodic observations and some contingency programming and thirty-two will function "quite adequately in the regular classroom with minimal contact by the teacher-counselor."

Pre and post Hill-Walker Behavior Problems Checklist Scores are shown in Table I. Of the 33 scores shown decrease in scores (better behavior) occurs in 30 cases. Students 12 and 13 show increases while student 21 remains the same.

2. Change the behavior of the classroom teacher so that she can change the behavior of the socially maladjusted/emotionally disturbed child so that he can function adequately in the regular classroom.

Fifteen teachers followed behavior modification programs with their children. The teacher-consultant achieved these results in three ways – (1) He set up individual programs for the children in cooperation with the teachers. Examples of these are reported under Objective 1.

(2) The teacher-counselor conducted formal instruction with the teachers. He tried two instructional models with them. The first lasted six weeks and was a lecture course. The course did not produce the desired results. Therefore a second instructional model was tried in which the teachers were to demonstrate some minimum competencies.

The competencies to be demonstrated were the following: pinpointing of behaviors to be changed; recording and graphing; making program changes necessary to accelerate or decelerate performance in the desired direction; prepare three one page reaction papers to three articles on behavior modification; read *Living With Children* by Patterson and Gullion and chapters 4 and 9 of *Changing Classroom Behavior* by Meacham and Wiesen. Specific criterion performance were designated for each of these competencies.

(3) The teacher-counselor charted the behavior of teachers, specifically the positive and negative comments which teachers made towards children. Examples of changes produced in teachers appear in Table II.

An examination of Table II indicates change in the desired direction in every teacher. An examination of the data presented on all teachers indicates no instances where the direction of change was not in the desired direction.

Comments were received from most of the teachers and indicate a high degree of support for the program. Most of the teachers were receiving help with one or two students and focused their comments on the improvements which the program had for those students. In almost all instances there were adequate data to support the comments. In some instances, the entire atmosphere of a class changed. Such a change is demonstrated by the following statement from a first grade teacher:

> In September my class was not well-disciplined. The children vaguely knew what was right and they mostly knew what they did wrong. My main emphasis had been on the negative aspect, such as, "Don't do that" – or – "Sit down right now," – which just didn't always work.
>
> I was becoming quite depressed over it and needed some outside help. Mr. Thomas stepped into the room to observe and began pointing out useful things to say or do. He called it Behavior Modification. I tried some of his suggestions and found my children challenged

Table I

Hill Walker Behavior Problem Checklists
Pre and Post Scores

Student	Date	Date	Acting Out		Withdrawal		Distractability		Disturbed Peer Relations		Immaturity		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	3/10	5/23	10	1	0	0	8	5	0	0	2	2	20	8
2	5/12	1/28	24	5	4	0	9	4	17	0	13	1	67	10
3	10/6	?	5	1	10	0	8	1	0	0	6	0	29	2
4	11/1	5/23	2	0	8	0	10	5	4	0	3	0	27	5
5	11/5	5/24	13	7	0	0	9	6	0	0	0	0	22	13
6	9/13	12/14	15	0	4	0	10	4	7	0	4	0	40	4
7	9/2	5/23	8	2	2	10	6	2	6	4	2	4	24	22
8	10/4	?	1	3	0	0	10	7	0	0	0	0	11	10
9	1/20	5/24	20	9	5	10	6	1	7	3	4	4	42	27
10	?	5/24	10	1	6	2	11	12	0	0	10	0	37	15
11	9/17	6/8	4	3	10	0	0	3	0	5	1	0	15	11
12	1/?	5/24	10	10	0	0	10	10	0	0	1	5	21	25
13	3/7	5/26	9	12	0	0	8	8	0	3	1	1	18	24
14	10/4	2/21	17	9	6	2	10	8	0	0	0	0	33	19
15	3/29	5/26	12	13	0	0	7	3	3	0	0	2	22	18
16	12/2	5/23	5	0	0	0	4	5	3	0	6	2	18	7
17	1/26	?	13	6	1	1	11	7	6	0	3	1	34	15
18	3/14	5/23	3	2	0	0	9	5	7	5	5	7	24	19
19	1/24	5/24	3	0	0	0	10	6	0	0	0	0	13	6
20	3/?	5/?	3	0	4	0	8	6	0	0	0	0	15	6
21	11/22	5/30	20	19	2	0	13	13	3	6	0	0	38	38
22	9/11	1/24	10	16	10	5	8	7	9	8	12	5	49	41
23	11/24	5/23	17	1	0	0	9	2	0	0	0	0	26	3
24	10/1	2/25	16	7	0	0	12	9	4	3	4	0	36	19
25	3/6	5/23	12	13	0	0	8	2	0	0	5	1	25	16
26	1/14	5/30	13	14	6	10	8	7	3	4	9	13	39	48
27	10/12	4/6	3	3	6	0	6	6	9	7	2	3	26	19
28	12/16	5/25	3	1	4	1	3	6	0	0	1	0	11	8
29	?	?	6	1	0	0	10	4	0	0	0	1	16	6
30	11/1	6/2	1	3	6	0	10	8	4	0	0	0	21	11
31	9/10	?	4	1	4	0	9	7	9	0	7	0	33	8
32	10/27	1/25	25	0	0	0	8	2	0	0	0	0	33	2
33	11/30	5/25	7	1	0	0	9	6	0	0	0	2	16	9

Table II

Observation of Teacher's Positive and Negative Comments Towards Children

Teacher	Baseline Rate/Minutes		End of Observation Period Rate/Minute	
	Positive	Negative	Positive	Negative
1	0.7	0.2	2.0	0.2
2	0.05	0.4	1.3	0.1
3	0.2	0.7	0.5	0.1

> to behave the way I asked. My class changed gradually, but it wasn't long before I had a well-disciplined group of first graders, who were quietly settled and could therefore learn much more.
>
> I have enjoyed my class so much more since I've used the techniques shared by Mr. Thomas and I am very thankful he was available when I needed the help.

3. ***Change the behavior of the parents of the socially maladjusted/emotionally disturbed child so that he can function adequately in society.***

The results of this objective are best reported by quoting the statement of the teacher-counselor:

> This objective was met in two ways. First, there were several individual parent conferences (25–30) during the school year. In approximately 85% of these conferences I gave parents numerous suggestions as to how to deal with their children. These suggestions were in the form of contingency programs. In most cases it was emphasized that in order to change the child's behavior they must change their own in one way or another. Often parents would act as reinforcers contingent upon appropriate school behavior by the child. This was reported as very successful when both the school and home would be consistent.
>
> Objective number three was also met through the means of a parent group. Ten sets of parents were selected and invited to attend a group to find more positive ways to attend to their children. Of the ten invited, six came to the group. Gerald Patterson's Book, *Living with Children*, was given to all parents to read. The class was initially designed for four sessions but went an extra three weeks at the request of the parents. It was our main goal to have parents realize what they were doing to reinforce the very behavior they wanted to extinguish. Several parents reported some success in dealing with their children, at least they felt better toward their children. With two sets of parents, I set up a complete home management program for dealing with their children. I continued to work with them until school was out. The last report was that the children were definitely changing their behavior — and it seems logical the parents were too. Unfortunately, no data were kept.

Third Party Evaluator's Comments:

An examination of the data submitted for this project indicates that not only are the data illuminous, but that they pinpoint improvements in most of the programs established for the children. Although only a sample of the data are presented in this report, readers interested in finding out further the extent of the results achieved in this project should contact the Director of Special Education at the Lake Oswego School District, for the data are extremely impressive.

One must look to this project as innovative, in that it is using a "different" model for the handling of behavior problems. A teacher-counselor is assisting not only children, but teachers, and is interacting with and assisting more than fifty children, a sizable difference between what is normally handled in the behavior problems class. Although the data cannot be considered conclusive evidence that this may be an alternative model to handling behavior problems in public schools, the data are significant enough to indicate that this model should be replicated in other settings with other teacher-counselors to determine if the model has the potential in other school districts that is indicated by the results presented here.

Only one area is disappointing, and that is the extent parent involvement. It has been the history of the third party evaluators that the conduct of training sessions with parents can only be adequately measured by the accumulation of data, especially when the trainer is not able to observe the parents in the home. This is not to say that the parents are not producing change in their relationship and in interactions with their child, but it is impossible for us to document these changes unless the data are presented. Moreover, it is believed that once parents learn to gather data and examine its results, that they will become much more efficient in the alleviation of behavior problems in the home. In addition, they will be reinforced for their performance by an examination of the graph or counts that they engage in in the home. It is strongly recommended that should this project continue in the school district that a greater effort be made to involve the parents in the data collection procedure.

Title of Project:	*The Value of Distar Reading vs. The Talking Page with Identified High-risk First Graders.*
Location:	*Lake Oswego Public Schools*
Type and Number of Children Served:	*90 Learning Disabled*
Funding Allocated:	*$1,646*
Project Beginning Date:	*September 6, 1971*
Project Ending Date:	*June 8, 1972*

Background and Rationale:

Even though the school district has six teachers certified in Extreme Learning Problems to serve 7 elementary schools, it has been an aim for the past few years to make greater attempts to prevent reading problems rather than remediate them.

Previous Title VI projects used a de Hirsch identification procedure and Distar Reading I with those identified as "high-risk." As students in both the control and experimental groups achieved at about the same level on the oral reading tests administered at the end of the year (except those receiving additional help in Distar Reading) it was felt that the de Hirsch tests were not reliable as an identification procedure.

A new means of identification using a readiness model being developed by Professors Adelman and Feshbach has been adopted by the school district. This project was testing that identification procedure and also examining two treatment methods – Distar and Talking Page.

Objectives and Evaluation Plan:

1. ***Evaluate the reliability of the new identification procedure in determining "high-risk" children.***
2. ***Compare the value of the Distar Reading programs and the Talking Page.***

Evaluation:

Both control and experimental students will be given Gilmore Oral Reading tests in the spring of 1972.

On the basis of the results from the test determine: (a) the reliability of the new identification test; and (b) the value of the Talking Page vs. the Distar Reading materials in teaching "high-risk" children to read.

20 Children from the middle group and 20 from the top will be added to get reliability of the screening instrument. These additional children will be administered the Gilmore Oral Reading Test.

Methodology:

Kindergarten teachers evaluated each student using the readiness model being developed by Professors Adelman and Feshbach.

The students were divided into four groups on the basis of their scores on the evaluation sheets.

The bottom quartile was selected for experimentation:

a. identified students in one school received reading instruction through the Talking Page;
b. identified students in three schools received reading instruction through Distar Reading;
c. identified students in three schools received reading instruction in any method selected by their classroom teacher except Distar Reading and Talking Page.

Results:

1. ***Evaluate the reliability of the new identification procedure in determining "high-risk" students.***

Group scores indicated that students evaluated in the top third group of the screening instrument scored highest on the Gilmore Oral Reading Test, those in the middle group scored next and those in the bottom group scored the lowest when measured on the Gilmore Oral Reading test. See Table I which gives the summary of the group scores for those first graders who received neither Distar nor Talking Page Instruction. These scores were achieved in the Gilmore Oral Reading Test administered in May, 1972. The correlation between the scores achieved on the screening instrument and the scores achieved on the Gilmore Oral reading tests administered in May, 1972 for those under neither the Distar nor Talking Page program, is

Table I

Summary of Group Scores

Score on Screening Instrument	N	Gilmore Oral Reading Scores	
		Accuracy	Comprehension
149-170	142	2.8	3.8
130-148	140	2.2	2.5
129 and below	138	1.7	2.5

Table II

Gilmore Oral Reading Scores of First Grade Children Classified as High Risk and Taught Reading by Distar, Talking Page and Other Methods

	Distar		Talking Page		Other	
	Accuracy	Comprehension	Accuracy	Comprehension	Accuracy	Comprehension
	3.9	3.6	1.2	.6	1.3	1.8
	1.7	2.8	1.0	1.8	3.1	3.1
	1.6	1.4	1.1	2.3	2.0	3.8
	1.5	1.8	2.2	3.4	2.4	4.1
	—	—	4.3	1.1	1.4	1.6
	2.5	2.3	1.3	1.8	1.3	.5
	1.9	1.6	2.1	4.1	2.7	3.4
	2.2	3.1	1.9	1.6	1.7	1.6
	1.7	1.8	1.4	2.8	2.0	1.0
	1.1	.8			1.3	1.4
	.9	1.0			1.8	1.6
	2.4	3.1			2.7	4.8
	2.8	2.6			1.4	.9
	3.2	3.8			1.2	2.8
	3.7	4.1			1.4	2.8
	3.4	2.8			1.5	1.8
	3.2	3.4			1.4	4.1
	2.2	1.9			.4	.6
	2.1	5.1			1.5	1.1
	1.6	1.8			3.1	5.8
	4.3	3.4			1.7	4.1
	4.8	4.1			1.7	1.9
	1.1	1.1			2.8	4.8
	2.9	5.4			1.9	2.8
	2.5	3.8			1.7	3.6
	1.3	2.8			1.5	2.8
	3.5	3.8			1.5	2.6
	3.3	5.4			1.1	2.8
	1.2	1.0			1.7	4.1
	1.9	2.1			2.0	4.1
	1.7	2.8			1.4	.5
	2.3	5.4			2.8	3.9
	3.8	4.2			1.4	1.0
	2.3	2.1			1.3	.9
	2.9	3.6			.6	.6
	2.4	4.1			2.1	1.3
	3.4	2.8			1.3	1.8
					1.1	1.8
					2.4	3.6
					.9	1.8
Mean	2.4	2.9	1.8	2.2	1.7	2.5
N	3.6		9		40	

.59, using a Spearman rank correlation coefficient. This is significant at the .01 level.

2. *Compare the value of the Distar Reading programs and the Talking Page.*

Students in the "high-risk" group (those who scored 129 and below in the screening instrument) who were taught to read using the Distar Method averaged 2.4 in accuracy and 2.9 in comprehension on the Gilmore Oral Test.

Those in the same category who were taught to read using the Talking Page averaged 1.8 in accuracy and 2.2 in comprehension.

Those in the "high-risk" group who were taught by methods other than Distar or Talking Page averaged 1.7 in accuracy and 2.5 in comprehension. Table II summarizes those results.

Utilizing the Mann-Whitney U Test (Siegel, S., *Non-Parametric Statistics for the Behavioral Sciences,* New York: McGraw-Hill Book Co., 1956, pp. 116-127) the following results were achieved: There were no significant differences between the Distar group, Talking Page group and the other group in comprehension on the Gilmore Oral Test. In accuracy, the Distar group was significantly better at the .05 level than both the Talking Page and the other group. P scores for each of the comparisons were as follows:

Accuracy:	Distar/Talking Page	.0351
	Distar/Other	.0336
	Talking Page/Other	.0735
Comprehension:	Distar/Talking Page	.4801
	Distar/Other	.1056
	Talking Page/Other	.4129

Third Party Evaluator's Comments:

This project makes a considerable contribution to the knowledge of instructional methodology for extreme learning problem children.

For a number of years the Lake Oswego Public Schools had been experimenting with identification procedures to determine those who are "high-risk" in schools. This project utilizes an identification procedure which, based upon the identification scores eventually achieved by the students and compared to the accuracy and comprehension scores on the Gilmore Oral Readings as administered the following May, indicates a correlation sufficiently high to be significant at the .01 level. This has potential of being a major contribution to knowledge about extreme learning problems. Further investigation is of course needed and one would hope that this investigation will be completed so that this screening instrument can be utilized with a large number of students in a number of school districts to determine its efficiency. It should also be compared with such other standard identification instruments such as the Basic Concept Inventory.

The program also utilizes three methods of instruction – Distar, Talking Page and any method that the teachers so desire. An examination of the results based upon the Gilmore Oral Reading scores indicates that the Distar group performed much better than either the Talking Page or the other in relationship to accuracy. Yet in comprehension there was no difference between the three groups. If one only examines the means between these three groups, of those who are classified as "high-risk," one sees the Distar group at a higher level in both accuracy and comprehension.

This type of a study, rather unique for Title VI undertakings, nevertheless provides some potentially valuable information to the extreme learning problem area. Further study is certainly indicated but there are trends in this study which need to be further explored and hopefully will be undertaken by the Oregon Board of Education or researchers elsewhere.

Title of Project: *Giant Step*

Location: *Lebanon Elementary Schools*

Type and Number of Children Served: *51 Learning Disabled*

Funding Allocated: *$18,187*

Project Beginning Date: *August 31, 1971*

Project Ending Date: *June 7, 1972*

Background and Rationale:

Special education services for the learning disabled in Lebanon School District 16 have been provided for children in grades 2 through 8. This project desired to extend specific special education services to learning disabled children in kindergarten and first grade with the belief that the following could be accomplished:

1. Provide for the early identification of children with learning disorders by the effective use of observation, diagnostic techniques and referral services.
2. Provide for the correction or improvement of existing conditions which undetected will become causative and contributing factors in the further development of more severe learning disabilities.
3. Provide a curriculum program of instruction designed to meet the needs of the learning disabled child.
4. Assist parents in understanding the needs of their learning disabled child.

Objectives and Evaluation Plan:

Minor revisions and additional objectives were added after the third party evaluators and the project director had agreed upon project objectives. Such newly stated objectives are as follows:

1. ***To determine individual needs of each child.***
2. ***To strengthen the physical-motor development.***
3. ***To develop language and communication skills.***
4. ***To develop sensory perceptual skills in the areas of visual discrimination, auditory discrimination and visual-motor skills.***
5. ***To develop reading readiness.***
6. ***To develop number readiness.***
7. ***To develop a positive self-concept.***
8. ***To recognize the worth of other individuals.***

Kindergarten. The Giant Step Readiness Survey was developed as the principle evaluation instrument for measuring student change in this project. This instrument is written in behavioral objective form and contains a variety of measures in each of the objective areas. The survey was administered on a pre- posttest basis in September and May.

The September scores served not only as an initial baseline to measure future growth but also an indicator for individual instructional levels.

First Grade. The Giant Step Readiness Survey was utilized at the first grade level in a like fashion to that in the kindergarten. However, the criterion levels in each survey area were usually increased above those established for the kindergarten population. The S.R.A. Primary Mental Abilities Test was also administered pre-post as a further measure for the academic skill objectives.

Methodology:

The project staff consisted of one head teacher and two assistant teachers, each of whom hold Oregon teaching credentials.

Each teacher traveled from school to school providing individual or small group instruction. In many cases instructional activities were conducted in the child's classroom, with the anticipation that the child's classroom teacher would observe and utilize materials and/or techniques of the project staff. When desirable facilities were available, project staff instructed in more isolated areas – hall, gym, library, special instruction rooms, etc.

The main emphasis of the head teacher was in the area of reading and number readiness. Traveling to all six schools, she saw each youngster two or three times each week, although her major focus was on the thirty first graders. The assistant teachers were scheduled into three schools each. These teachers saw each child three to four times each week, instructing either individually or in small groups in areas of the child's weakness as indicated by the diagnostic instruments.

Parental involvement included coffee gatherings at each school for parents of Giant Step children in that school. At those times parents were introduced to the staff, materials and techniques to be utilized in their child's instruction. Contact was maintained through visits of the parents to schools to observe Giant Step sessions, conferences in the home and parent-teacher conferences at school. Learning packages were developed and sent home with many children to be administered by the parents in the home and returned to the staff.

Results:

Kindergarten

1. To determine the individual needs of each child.

The original referral sheets were reviewed by teachers and showed probable areas of need. Evaluative instruments included the Giant Step Readiness Survey, Illinois Test of Psycho-Linguistic Abilities and the Peabody Picture Vocabulary Test. Results of these tests were used in making educational decisions for each child. However, only the results of the Giant Step Readiness Survey are discussed under objectives for the kindergarten population.

2. To strengthen the physical-motor development.

The established criterion stated that each child would successfully complete 70% of the tasks in the motor development section. Of the twelve kindergarten children, only two reached criterion on the pretest as compared to nine (75%) on the posttest. The average per cent gain in the physical-motor develoment area was 50.83% with all but one child scoring higher on the posttest. (See Table Ia and Table III.)

3. To develop language and communication skills.

The established criterion stated that each child would successfully complete 50% of the tasks on the language and communication skills area. Of the twelve kindergarten children, seven reached criterion on the pretest as compared to twelve (100%) on the posttest. The average per cent gain in the language and communication area was 29.16% with all but one child scoring higher on the posttest. (See Table Ia and Table III.)

4. To develop sensory perceptual skills in the areas of visual discrimination, auditory discrimination and visual motor skills.

Visual Discrimination. The established criterion stated that each child would successfully complete 60% of the tasks in the visual discrimination section. Of the twelve kindergarten children nine reached criterion on the pretest as compared to twelve (100%) on the posttest. The average per cent gain in the visual discrimination area was 26.66% with all but three children scoring higher on the posttest. (See Table Ia and Table III.)

Auditory Discrimination. The established criterion stated that each child would successfully complete 60% of the tasks in the auditory discrimination section. Of the twelve kindergarten children four reached criterion on the pretest as compared to twelve (100%) on the posttest. The average per cent gain in the auditory discrimination area was 33.33% with all but three children scoring higher on the posttest. (See Table Ia and Table III.)

Visual Motor Skills. The established criterion stated that each child would successfully complete 40% of the tasks in the visual motor skills section. Of the twelve kindergarten children two reached criterion on the pretest as compared to twelve (100%) on the posttest. The average per cent gain in the visual motor skills area was 41.66% with all but three children scoring higher on the posttest. (See Table Ia and Table III.)

5. To develop reading readiness.

The established criterion stated that each child would successfully complete 50% of the tasks in the reading readiness section. Of the twelve kindergarten children, none reached criterion on the pretest as compared to seven (58%) on the posttest. The average per cent gain in the reading readiness area was 30% with all children scoring higher on the posttest. (See Table Ia and Table III.)

6. To develop number readiness.

The established criterion stated that each child would successfully complete 40% of the tasks in the number readiness section. Of the twelve children, five reached criterion on the pretest as compared to twelve (100%) on the posttest. The average per cent gain in the number readiness area was 25% with all but two children scoring higher on the posttest. (See Table Ia and Table III.)

7. To develop a positive self-concept.

The established criterion stated that each child would receive a minimum of 75 out of a possible 105 points. The self-concept measure was a list of fifteen behaviors on which the child's teacher was to evaluate subjectively the frequency of specified behaviors as observed in each child. The assigned point values for the frequencies were: usually – 7, sometimes – 5, and seldom – 3.

Seven of the children reached criterion on the pretest as compared to twelve (100%) on the posttest. The average gain was 16.5 points with all children scoring higher on the posttest. (See Table Ib and Table III.)

8. To recognize the worth of other individuals.

The established criterion stated that each child would receive a minimum of 75 out of a possible 110 points. The recognition of other's worth section was also a subjective evaluation of the frequency of social behaviors exhibited by each child. The assigned point values for the eleven behaviors in this area were: usually – 10, sometimes – 5, and seldom – 3.

Four children reached criterion on the pretest as compared to 100 (83%) on the posttest. The average gain was 19.25 points with all children increasing their posttest scores over 5 points. (See Table Ib and Table III.)

First Grade

1. To determine the individual needs of each child.

The original referral sheets were reviewed by teachers and showed probable areas of need. Evaluation instruments included the Giant Step Readiness Survey, Illinois Test of Psycho-Linguistic Abilities Test. Results of these tests were used in making educational decisions for each child. However, only the results of the Giant Step Readiness Survey and the S.R.A. Primary Mental Abilities Test are discussed under objectives for the first grade population.

2. To strengthen the physical-motor development.

The established criterion on the Giant Step Readiness Survey stated that each child would successfully complete 90% of the tasks in the motor development section. Of the 36 first grade children only 8 reached criterion on the pretest as compared to 35 (97%) on the posttest. The average per cent gain in the physical-motor development area was 36% with all but two children scoring higher on the posttest. (See Table IIa.)

3. To develop language and communication skills.

The established criterion on the survey stated that each child would successfully complete 90% of the tasks in the language and communication skills section. Of the 36 first graders, only 7 reached criterion on the pretest as compared to 35 (97%) on the posttest. The average per cent gain in the language and communication skills area of the survey was 26% with all but four children scoring higher on the posttest.

The verbal section of the S.R.A. Primary Mental Abilities Test showed a mean pretest score of 94.18 for the first grade population. The posttest mean was 104.97 for a mean point increase of 10.79 for the group. Of the 36 children for whom scores are reported, 30 scored higher on the posttest with the other 4 scoring lower. (See Table V and Table VI.)

4. To develop sensory perceptual skills in the areas of visual discrimination, auditory discrimination and visual motor skills.

Visual Discrimination. The established criterion on the survey stated that each child would successfully complete 80% of the tasks in the visual discrimination section. Of the 36 first graders, 33 children reached criterion on the pretest as compared to 36 (100%) on the posttest. The average per cent gain in the visual discrimination area was 33.5% with all but seven children scoring higher on the posttest. (See Table IIa and Table IV.)

Auditory Discrimination. The established criterion in the auditory discrimination section stated that each child would successfully complete 80% of the tasks in this area. Of the 36 first graders, 10 reached criterion on the pretest as compared to 33 (92%) on the posttest. The average per cent gain in the auditory discrimination area was 32.22% with all but six children scoring higher on the posttest. (See Table IIa and Table IV.)

Visual-Motor Skills. The established criterion in the visual-motor skills section stated that each child would successfully complete 80% of the tasks in this area. Of the 36 first graders, 26 reached criterion on the pretest as compared to 36 (100%) on the positest. The average per cent gain in the visual-motor skills area was 8.88% with thirteen children scoring higher on the posttest. (See Table IIa and Table IV.)

5. To develop reading readiness.

The established criterion in the reading section stated that each child would successfully complete 80% of the tasks in this area. Of the 36 first graders two reached criterion on the pretest compared to 28 (78%) on the posttest. The average per cent gain in reading readiness was 47.22% with every child scoring higher on the posttest. (See Table IIa and Table IV.)

The S.R.A. Primary Mental Abilities Test was used as a second unit of measure to determine student change in reading readiness skills. The pretest data yielded a mean perceptual speed quotient of 100.53. Posttest quotients showed a mean of 113.38 points for a 12.85 mean quotient increase on this subtest. Of the 34 children for whom scores are reported, 30 scored higher on the posttest with 3 scoring lower. (See Table V and Table VI.)

6. To develop number readiness.

The established criterion in the number readiness section stated that each child would successfully complete 80% of the tasks in this area. Of the 36 first graders, 15 reached criterion on the pretest as compared to 35 (97%) on the posttest. The average per cent gain in number readiness was 26.66% with all but two children scoring higher on the posttest. (See Table IIa and Table IV.)

The use of the S.R.A. Primary Mental Abilities Test to indicate student change in number readiness skills showed a mean quotient score increase of 12.96 points (pretest 97.01; posttest 109.97). Of the 34 children for whom scores are reported, 29 scored higher on the posttest with 5 scoring lower. (See Table V and Table VI.)

7. To develop a positive self-concept.

The established criterion stated that each child would receive a minimum of 75 out of a possible 105 points. The self-concept measure was a list of 15 behaviors on which the child's teacher was to subjectively evaluate the frequency of specified behaviors as observed in each child. The assigned point values for frequencies were: usually – 7, sometimes – 5, and seldom – 3.

Twenty children reached criterion on the pretest as compared to 34 (94%) on the posttest. The average gain was 11.88 points with all but eight children receiving higher scores on the posttest. (See Table IIb and Table III.)

8. To recognize the worth of others.

The established criterion on the survey stated that each child would receive a minimum of 75 out of a possible 110 points. The recognition of other's worth section was also a subjective evaluation of the frequency of social behaviors exhibited by the child. The assigned point values for the eleven behaviors in this area were: usually – 10, sometimes – 5, and seldom – 3.

Eleven children reached criterion on the pretest as compared to 24 (67%) on the posttest. The average gain was 15.55 points with all but 4 children scoring higher on the posttest. (See Table IIb and Table III.)

Third Party Evaluator's Comments:

The general intent of this program was to identify "high probability" slow learners in kindergarten and first grade, and provide them with basic skills viewed by the project as prerequisites to learning. The overall goal, then, is not to remediate learning difficulties after they have developed and been identified, but rather to prevent learning problems through early provision of extended special education services.

The data are very supportive of the success of this program. Each project objective was realized by a large percentage of students and the amount of gain for those objectives was large. The amount of group mean gain in certain areas was in excess of 50% of those specified skills. However, there are three particular areas that should be of major concern to educators.

Development of language and communication skills have long been known to have a positive correlation with success in school. The results of the Giant Step Readiness Survey certainly would indicate that the majority of project students have made sizeable gains in this area. Only one student did not reach the established criteria for this section of the Survey. Both the Survey and the S.R.A. Primary Mental Abilities Test show substantial growth in this area.

Other skills of major concern to early childhood teachers are reading and number readiness. Although the number of children reaching criterion were less numerous than in language, the amount of gain was appreciable in each area. Again, both the Survey and the S.R.A. P.M.A.T. show the project to have produced substantial growth.

A major strength of the Giant Step project was the initiation and implementation of a behaviorally oriented curriculum which is very effective as a measurement instrument as well. All major curriculum areas were broken down with specified behaviors and criterion levels of acceptable behavior. One must be impressed with the success of the staff in identifying precisely what skills were to constitute the more global areas in a curriculum.

While the development of a behaviorally based curriculum is of paramount significance to the specificity of any program, so too is the need for continual revision. Project staff are vitally aware of this need and expressed concern about the sensitivity of the Giant Step Survey in various curriculum areas. The frequency of students obtaining maximum scores in these areas would well suggest that one of two causes of reform are to be taken. If a child has reached criterion in all areas and is nearing mastery of all skills he should either be dropped from the program, allowing room for another child, or additional higher level skills need to be added in each area. What action to be taken is largely determined by the staff's view of "necessary skills" and the number of students in need of project assistance.

In the inital visitation, the third party evaluator found the persistence of a problem that had plagued the project the previous year. Classroom teachers tended to visualize the project staff as extensions of the regular classroom and thus tried to dictate the activities of the project teachers. The lack of articulation between classroom and special teachers was determined as a major contributor to this misunderstanding. But of more significance was the lack of communication between the two sets of teachers about methods each teacher was using and the inability of each teacher to reinforce what the other was teaching. Fortunately, this situation was largely remediated towards the end of the year.

In conclusion, the third party evaluator stresses that project objectives were almost completely realized. In most instances large gains were accomplished by every child in all areas. However, the true success of this program will be determined as these children progress through their elementary school years, hopefully with few difficulties.

Table Ia

Giant Step Readiness Survey (Kindergarten)
Number and Degree of Student Change in Cognitive and Performance Skills

Percent of Change from Pre- to Posttest

Area	+100	+90	+80	+70	+60	+50	+40	+30	+20	+10	0	-10	-20
Physical-Motor Development	1	1	0	4	1	0	0	1	2	1	1	0	0
Language and Communication	0	0	0	0	0	1	4	4	1	1	0	1	0
Sensory – Perceptual													
Visual Discrimination	0	0	0	0	2	0	3	0	4	0	3	0	0
Auditory Discrimination	0	0	0	0	4	0	3	0	2	0	3	0	0
Visual Motor	0	0	2	0	4	0	2	0	1	0	3	0	0
Reading Readiness	0	0	0	0	0	2	2	3	4	1	0	0	0
Number Readiness	0	0	0	0	0	1	3	3	1	2	2	0	0

Table Ib

Giant Step Readiness Survey (Kindergarten)
Number and Degree of Student Change in Attitude

	Points Gained or Lost from Pre- to Posttest								
Area	+(35-31)	+(30-26)	+(25-21)	+(20-16)	+(15-11)	+(10-6)	+(5-1)	0	-(1-5)
Positive Self-concept	0	2	3	1	1	4	1	0	0
Recognize Worth of Others	2	0	2	3	4	1	0	0	0

Table IIa

Giant Step Readiness Survey (First Grade)
Number and Degree of Student Change

	Per cent of Change from Pre- to Posttest												
Area	+100	+90	+80	+70	+60	+50	+40	+30	+20	+10	0	-10	-20
Physical-Motor Development	0	1	1	0	4	2	8	9	3	6	2	0	0
Language and Communication	0	0	0	1	2	2	8	7	8	4	4	0	0
Sensory – Perceptual													
Visual Discrimination	0	0	1	0	5	0	16	0	7	0	6	0	1
Auditory Discrimination	0	0	1	0	5	0	16	0	7	0	6	0	0
Visual Motor	0	0	0	0	0	0	5	0	8	0	21	0	2
Reading Readiness	0	2	2	2	5	7	9	3	6	0	0	0	0
Number Readiness	0	0	0	0	1	6	8	4	9	6	2	0	0

Table IIb

Giant Step Readiness Survey (First Grade)
Number and Degree of Student Change

	Point Changes from Pre- to Posttest													
Area	+(40-36)	+(35-31)	+(30-26)	+(25-21)	+(20-16)	+(15-11)	+(10-6)	+(5-1)	0	-(1-5)	-(6-10)	-(11-15)	-(16-20)	-(21-25)
Self-concept	1	4	3	2	6	2	6	4	3	2	2	1	0	0
Recognizes Worth of Others	2	3	6	4	2	3	10	2	1	0	1	1	0	1

Table III

Giant Step Readiness Survey (Kindergarten)
Individual Student Gain Scores

	Per cent Gain							Score Gains	
Student	Physical-Motor Development	Lanugage & Communication	Visual Discrimination	Auditory Discrimination	Visual-Motor	Reading Readiness	Number Readiness	Self-Concept	Recognize Worth of Others
1	+70	+30	+40	+40	+60	+30	+40	+10	+10
2	+20	+50	+40	+60	+80	+50	+40	+24	+24
3	+70	+40	+20	0	0	+20	0	+ 8	+19
4	+70	+40	+60	+60	+60	+30	+30	+13	+12
5	+70	+30	+60	+40	0	+20	0	+29	+19
6	+100	-10	+20	+20	+40	+40	+10	+25	+25
7	+90	+40	+20	+20	0*	+50	+30	+22	+32
8	+60	+30	+40	0	+60	+30	+50	+10	+15
9	+30	+40	0	+60	+80	+40	+20	+18	+33
10	+20	+30	0*	+40	+40	+20	+10	+27	+13
11	0	+10	0	+60	+20	+20	+30	+ 7	+17
12	+10	+20	+20	0	+60	+10	+40	+ 4	+12

*Student scored 100% on both pre- and posttest.

Table V

Mean Quotient Scores and Average Gains
in S.R.A. Primary Mental Abilities Test

	Pretest	Posttest	Mean Gain
Verbal	94.18	104.97	+10.79
Perceptual Speed	100.53	113.38	+12.85
Number	97.01	109.97	+12.96
Spacial Relationship	91.59	95.94	+ 4.35
Total	94.84	107.00	+12.16

Table IV

Giant Step Readiness (First Grade)
Individual Student Gain Scores

	Per cent Gain							Score Gains	
Student	Physical-Motor Development	Lanugage & Communication	Visual Discrimination	Auditory Discrimination	Visual-Motor	Reading Readiness	Number Readiness	Self-Concept	Recognize Worth of Others
1	+30	+20	+20	+40	+20	+50	+40	- 8	-22
2	+30	+60	+40	+40	0*	+80	+50	-10	-10
3	+20	+40	0*	+20	0*	+60	+20	+ 4	+34
4	0*	0*	0*	+40	+20	+50	+20	+ 8	+20
5	+10	+20	+20	+40	0	+20	+40	+ 1	+ 7
6	+60	+70	+40	+40	+40	+60	+40	+26	+ 8
7	+30	+30	0*	+60	0*	+50	+50	+ 4	+22
8	+10	+40	+20	+60	0*	+90	+50	+19	+30
9	+40	+30	+20	0	+20	+40	+50	+36	+20
10	+40	+20	+20	+40	+40	+40	+30	0	+10
11	+60	+50	+20	+40	+40	+60	+40	+20	+35
12	+30	+10	0*	+20	0*	+40	+40	+10	+25
13	+10	+60	0*	+40	0*	+80	+10	+14	+27
14	+40	0*	0	+60	+20	+40	+20	- 2	+10
15	+40	+10	0*	+40	0*	+20	+20	+33	+36
16	+20	+40	0*	+60	+20	+40	+10	+ 2	+12
17	+10	+20	0*	+40	0*	+20	+20	+17	+21
18	+10	+40	0*	+20	-20	+30	0	+15	+ 6
19	+90	+40	-20	0	0*	+20	+20	+ 8	+30
20	+50	+50	0*	+20	+20	+30	+30	+28	+ 5
21	+20	+40	0*	+40	0+	+50	+10	+ 7	0
22	+30	+30	+20	-20	+20	+70	+30	+16	+26
23	+30	+40	+20	0*	+40	+40	+20	+26	+36
24	+50	+30	0*	0	+20	+20	+20	- 3	+ 7
25	+30	+30	0*	+20	-20	+30	+40	+20	+15
26	+60	+40	+20	+40	+40	+50	+60	+21	+ 7
27	0*	+30	0*	+40	0*	+40	+40	+ 6	+ 6
28	+40	+20	0*	0*	0	+50	+10	+26	+32
29	+30	0	0*	+80	0*	+60	+20	+16	+10
30	+30	+10	0*	+40	0*	+50	0*	-11	-11
31	+10	+20	0*	+40	0*	+60	+10	0	+27
32	+50	+10	+20	+20	0*	+90	+50	0	+ 9
33	+40	0*	0*	+20	0*	+40	+30	+34	+14
34	+60	+30	+20	+40	0*	+40	+50	+23	+28
35	+40	+20	+20	+60	0*	+20	+40	+10	+ 5
36	+60	+20	0*	0*	0*	+70	+10	+31	+23
37**	+20	+10	0*	+60	0*	+40	+10	+16	+10
38***	+20	0	0*	0*	+50	+20	0*	0	+27
39****	0*	+10	0*	0	0*	+20	0*	+40	+10

* Student scored 100% on both pre- and posttest.

** Posttest given 1-13-72. Child above criterion in all areas and thus dropped from program.

*** Posttest given 2-15-72. Child above criterion in all areas and thus dropped from program.

**** Posttest give 3-10-72. Child above criterion in all areas and thus dropped from program.

Table VI

Pre- Posttest Scores on
S.R.A. Primary Mental Abilities Test

Student	Verbal Meaning		Perceptual Speed		Number Facility		Spacial Relations		Total Quotient	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	88	96	88	109	93	119	79	84	85	101
2	84	110	95	110	95	105	76	90	76	105
3	92	115	142	135	106	115	108	105	106	118
4	114	115	114	125	97	115	100	95	106	112
5	95	112	74	93	108	100	82	90	89	100
*6	BN	93	BN	85	BN	85	BN	81	BN	88
7	–	–	–	–	–	–	–	–	–	–
8	111	114	111	128	94	119	106	96	106	114
9	85	93	75	119	61	110	61	90	75	102
10	101	119	85	122	101	111	87	94	93	111
11	51	99	83	122	77	101	51	96	66	104
12	108	120	103	132	92	122	68	102	97	122
13	84	103	84	121	86	117	89	99	84	112
*14	BN	90	BN	87	BN	115	BN	83	BN	92
15	93	106	115	124	98	115	95	101	100	113
16	114	119	114	132	122	132	122	111	119	124
17	100	109	111	122	133	137	84	99	106	114
18	89	103	104	86	84	106	106	86	94	95
19	64	81	90	102	59	88	72	84	72	88
20	71	89	78	96	71	89	63	84	71	91
21	99	110	87	105	96	105	110	95	96	105
22	96	98	73	108	87	106	82	80	85	98
23	94	97	96	107	94	99	99	87	96	99
24	93	118	128	130	101	94	117	111	104	113
25	85	113	93	125	99	104	99	106	91	113
26	101	111	99	113	106	108	101	94	101	108
27	–	–	–	–	–	–	–	–	–	–
28	100	106	97	125	103	120	92	111	97	116
29	87	91	98	85	93	89	98	89	93	89
30	98	97	120	105	120	114	110	108	110	105
31	113	110	108	118	99	118	99	112	105	114
32	97	89	108	106	100	109	72	91	94	96
33	108	120	111	132	111	117	95	95	105	117
34	96	103	99	112	86	112	89	92	94	103
35	101	114	134	119	115	128	107	119	112	119
36	–	–	–	–	–	–	–	–	–	–
37	–	–	–	–	–	–	–	–	–	–
38	102	106	100	115	121	115	112	102	107	111
39	–	–	–	–	–	–	–	–	–	–

*BN – pretest score below norm.

Title of Project:	*Junior High School Program for Emotionally Disturbed Children*
Location:	*Heights Junior High School, Parksrose*
Type and Number of Children Served:	***Approximately 60 junior high school-aged children of average to above average intelligence whose behavior was characterized by both academic and behavioral problems in the school setting.***
Funding Allocated:	*$20,543*
Project Beginning Date:	***August 23, 1971***
Project Ending Date:	***June 16, 1972***

Background and Rationale:

In 1964 Parkrose Schools and Multnomah County Mental Health Clinic (with NIMH funds) initiated a four year school based program for severely disturbed elementary-age children. This project met with sufficient success and local acceptance that it is now an integral part of the district's special education program.

Efforts to increase the flexibility and productivity of this program resulted in the initiation of a Title VI grant for a social transition classroom to serve those children who had made sufficient growth in the program for severely disturbed so that they could: (1) benefit from a classroom environment more nearly like that of a regular classroom setting yet maintain sufficient structure to insure individual success through social and academic rewards; and (2) serve the needs of a number of children who could not meet the criteria for placement in the classroom for the severely disturbed yet were failing to achieve the minimum standards of performance in their regular classrooms. This project proved to be of such benefit that it has also received district support, although the climate for new program development in most districts was seriously limited because of current economic conditions.

The experience with the two classes at the elementary school left the district with two pressing and unanswered problems. The first concerned children who had made some progress in the elementary program but needed additional support as they moved into junior high school. The second problem centered around the need for some type of program to handle children whose social-emotional problems did not surface until they reached junior high school. To answer these needs a project was initiated under Title VI for the education of disturbed children in the 12-15 age group.

In its first year (1970-71) the project dealt primarily with acting-out eighth and ninth grade males. Consequently, the major effort went into remediating behavioral problems at the expense of alleviating academic weaknesses. In most cases parent involvement was minimal. The program did provide the school with much needed support and guidance in handling "emotionally disturbed" students and consequently was well received by administrators and staff.

Nevertheless, the question remained as to whether broader and more significant gains could be made if the program dealt with a larger spectrum of the student's environment, both academic and behavioral school problems, as well as work with the family. In order to answer this question the current project was funded with increased district support.

Objectives and Evaluation Plan:

1. ***To diagnose academic and behavioral weaknesses and suggest approaches for their correction.***

   Administer the California Test of Basic Skills (CTBS), various subtests of the Illinois Test of Psycholinguistic Abilities, WISC, and Walker Checklist. Use Behavioral Data Checklist and video tape to examine student behavior. Review and assess these measures to determine the effectiveness of intervention activities.

2. ***To provide classroom experience designed to increase the output of positive social behavior and improve academic performance in the basic skills.***

   Posttest with CTBS. Compare current observational data with diagnostic observational data.

3. ***To conduct counseling sessions designed to assist in the development of positive behaviors.***

   Behavior to be remediated will be pinpointed and specific data submitted including baseline and subsequent performance data.

4. ***To provide parents with training in behavior modification techniques and to assist them in applying these techniques.***

   Parents will carry out behavior modification programs and report findings to counselors.

5. ***To insure successful reintegration of project children into a regular school program.***
6. ***To continue revision and refinement of the present model for the education of emotionally disturbed children within the structure of a regular junior high school.***

   Compare working model at end of school year with current model, pinpoint and document changes.
7. ***To train and retrain regular classroom teachers to use behavior modification techniques.***

   Teacher questionnaire. Completion of behavior modification project. Operationalize these techniques in their classes.

Methodology:

Heights Junior High School operates on a modular schedule with twenty-six fifteen minute modules each day of a six day cycle. Approximately 40% of the student's time is "unstructured" or "free."

Students chosen for the Title VI program were assigned to regular classroom teachers who had successfully completed an in-service behavior modification program offered the previous year. In addition, all students were scheduled into the special project classroom during all of their "unstructured" or "free" time.

The program was designed to work with each student in three areas: (1) remediation of academic weaknesses; (2) extinction of inappropriate and self-defeating school behaviors – to be replaced by appropriate, positive behaviors; and (3) improving the parents' ability to become involved in changing their child's inappropriate behaviors.

In order to improve academic performance in the basic skills, several approaches were employed. First, students were placed only in those classes in which their existing performance level would enable them to benefit from regular class instruction. Most Title VI students were enrolled in four or five courses; six is a regular load. All students were enrolled in physical education, fine arts (shop, art, chorus, or speech) and social studies. Then, depending on their area(s) of weakness, students were placed in remedial reading with the building reading specialist (10 students); remedial math taught by the math department and the Title VI staff (5 students); remedial English taught by the Title VI staff (5 students); and remedial science taught by the science department for eighth graders (2) and by the Title VI staff for seventh graders (6). These courses were designed to allow each student to work at an individualized pace on an individual lesson plan.

A second method for improving academic performance was the use of contracts. Each student worked on a contract at all times. These contracts were agreements made between the student and the Title VI teacher or coordinator to improve a specific behavior for a specific period of time in order to obtain a set reward. Rewards included such things as being allowed to use "free" time outside of the project classroom (art room, shop, home economic room, etc.), a record, a pair of shoes, lunch with the teacher, tickets to athletic events, etc. Charts were kept on every contract and the student could see his chart upon request. Usually the teacher showed it to the student every morning or at the close of the school day. By the end of the year many of the contracts dealt with academic behavior.

A third method for improving academic performance was the use of field trips. A "major" field trip was held following each nine week grading period. All Title VI students who had received all C's or above with one exception (one D was permitted, but no F's) were eligible for the trip. The four trips were: (1) all day at the beach at Seaside; (2) a day sledding on Mt. Hood; (3) an overnight (Friday and Saturday) camping trip to Fort Stephens State Park; and (4) an overnight camping trip to Cape Lookout State Park.

The fourth method for improving academic performance was the use of free time, cokes, or early dismissal for work production.

In addition, the Title VI staff cooperated with the regular classroom teachers to provide the students with help on their assignments and to keep parents continually informed regarding their child's academic progress.

Three methods were used to extinguish inappropriate school behaviors and replace them with more acceptable behaviors. First, most of the contracts on which students worked were related to school behavior. Furthermore, each contract had a negative consequence as well as a positive reward.

Secondly, throughout the year various charts were posted which listed several problems which many of the students were having. "Minor" weekly or biweekly field trips and parties were planned and those students who had fewer than a specified number of marks or initials were able to attend. Often it was necessary for all class members to have fewer than the limit of marks if the trip was to be taken. (Peer pressure was highly effective.)

Thirdly, the Title VI coordinator worked with teachers of project students to plan behavior modification projects in the classrooms. These often included ignoring certain responses while reinforcing others, reinforcing an entire class for ignoring inappropriate behavior by a project student, etc.

Student placement and continuation in the project was contingent upon satisfactory parental involvement. Contracts were drawn up with the parents which required them to attend weekly group meetings, biweekly conferences with the Title VI coordinator and to respond to phone contacts from the Title VI staff. Failure in any of these areas provided sufficient cause for expulsion of their child from the program.

Results:

1. To diagnose academic and behavioral weaknesses and suggest approaches for their correction.

Academic weaknesses were determined through evaluation of Metropolitan scores, the California Test of Basic Skills (CTBS) and the New Developmental Reading Tests. These instruments were used to determine degree of student placement in the regular classrooms, special Title VI courses, and remedial reading with the building reading teacher. When placement was made in a regular classroom setting, teachers were informed of the academic test results and specific recommendations were made for each Title VI student.

Behavioral weaknesses were determined through the analysis of the Walker Problem Behavior Identification Checklist, tracking behavior in the project classroom and regular classroom utilizing the Title VI Behavioral Data Checklist (Figure 1) and staffings held on each student. Staffings included the student's teachers, school counselors, administrators, and the Title VI staff. Strategies for modifying behaviors were determined and agreed upon by Title VI staff members and regular classroom teachers. In addition, the evaluations provided the basis for setting up a contract with each student.

2. To provide a classroom experience designed to increase the output of positive social behavior and improve academic performance in the basic skills.

Pre- and posttests were conducted utilizing subtests 3, 4, 6 and 7 of the California Test of Basic Skills (Table I). In order to provide more accurate measurement of reading skills, the building reading teacher administered pre- and posttests on the New Developmental Reading Test to those students whose reading ability was seen as an academic problem area (Table II). Furthermore, students' grade point averages were recorded (Table III).

An examination of the data indicates the following results. On the language subtests of the CTBS (Table I) complete pre- and posttest data were available on eighteen students. Of these, twelve showed gains in both language mechanics and language expression; three (students 3, 15, and 18) showed gains in one of the two areas and no gain in the other areas. Two students (7 and 14) showed mixed results, gaining in one area and losing in another. Student 6 showed a loss in both language areas. In mathematics (Table

Name
Class

Observer
Teacher

Date

	IA	M	PI	TI	Y	X	IT	IP	WK	AT	NA	WK	IP	IT	X	Y	TI	PI	M	IA
1																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				
13																				
14																				
15																				
16																				
17																				
18																				
19																				
20																				

AT – Attending
NA – Non-attending
WK – Work
IP – Initiation to Peer
IT – Initiation to Teacher
X – Peer Interaction
Y – Teacher Interaction
TI – Teacher Initiation
M – Movement
IA – Independent Activity

Comments (Preceding Events & Task)

Figure 1
Title VI Behavioral Data Checklist

Table I

Pre- and Posttest Results
California Test of Basic Skills

Student	Language Mechanics Test 3		Language Expression Test 4		Arithmetic Computation Test 6		Arithmetic Concepts Test 7	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	4	12	5	7	6	13	8	7
2	4	13	6	9	3	8	0	7
3	11	11	19	20	23	26	11	16
4	4	9	4	7	8	18	0	13
5	8	19	12	21	36	40	9	20
6	12	7	13	10	12	23	0	12
7	7	6	11	16	2	8	0	0
8	6	12	10	13	0	19	0	19
9	4	7	3	12	9	16	9	7
10	12	16	7	9	5	14	0	11
11	15	20	21	24	4	45	9	28
12	11	17	17	21	21	16	12	15
13	7	21	3	22	10	45	0	17
14	18	16	0	20	5	18	2	9
15	6	6	4	13	19	39	5	20
16	*	*	*	*	2	9	*	*
17	13	20	9	16	26	27	6	12
18	9	13	10	10	21	24	19	14
19	0	4	0	17	1	2	5	11
20	0	–	0	–	8	–	7	–
21	3	–	10	–	8	–	0	–
22	9	–	11	–	25	–	–	–

– Indicates that the student was not available for posttesting.

* Indicates that the student was unable to work at the level of the test and consequently it was not administered.

Table II

Pre- and Posttest Results
The New Development Reading Test – Intermediate Level
Scores in Grade Level

Student	Part I Basic Reading Vocabulary		Part II Reading for Information		Part III Reading for Relationship		Part IV Reading for Interpretation		Part V Reading for Appreciation		Parts I & II Literal Comprehension		Parts IV & V Creative Comprehension		Parts II, III, IV, & V General Comprehension	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
18	4.7	8.1	5.2	7.3	6.9	7.2	6.4	6.7	7.1	8.2	5.1	7.1	6.9	7.6	6.1	7.6
1	5.3	5.9	4.4	5.0	3.5	6.5	2.9	6.3	3.9	4.2	3.9	5.6	3.3	5.2	3.7	5.5
4	3.3	3.6	4.8	4.6	3.0	3.4	3.3	3.6	5.4	3.9	3.7	3.7	3.9	3.7	3.9	3.8
8	5.7	6.8	4.4	6.2	4.7	6.0	6.1	8.1	7.1	6.8	4.3	6.0	6.5	7.5	5.4	7.0
14	4.7	6.8	5.2	4.4	4.7	5.2	*	*	*	*	4.2	4.8	*	*	*	*
**16	--	4.1	--	3.6	--	3.0	--	3.3	--	4.9	--	3.2	--	3.8	--	3.7
19	5.7	6.5	5.2	6.2	4.3	6.8	6.1	6.1	7.1	7.4	4.7	6.4	6.5	6.7	5.6	6.7

* Student failed to complete these portions either pre or post.

** Reading teacher felt pretesting would be too discouraging due to low reading level and self-concept at that time.

I) complete data are available on eighteen students. Thirteen showed gains in both arithmetic computation and arithmetic concepts. Four students (1, 9, 12, and 18) showed a gain in one area and a loss in the other. Student 7 gained in arithmetic computation while demonstrating no gain in arithmetic concepts.

Reading test results (Table II) show that all six students for whom data are available produced gains in basic reading vocabulary. In general reading comprehension – a combined total of all subtests other than vocabulary – four of five students showed gains. One student (4) showed a slight decrease.

The Title VI staff plans to give pre and post reading tests to all project students next year. The satisfactory integration of the school reading program and the Title VI program was hindered this year by a weakness in the school reading teacher's ability and desire to work with Title VI students. The Title VI staff shares responsibility for this situation. Plans are currently being made to develop situation where the reading teacher can be given more training, support and structure in dealing with problem students. This plan should increase the number of Title VI students who can receive remedial reading instruction.

Table III tracks grades of the children. Of the fifteen children for whom grades are available in the quarter prior to entry in the program and for whom data are available during the 4th quarter of the project year, fourteen showed increases in grade point averages. One (student 13) showed no gain. Although student 5 showed gains these hardly can be considered as a demonstration of academic improvement. In the quarter prior to entry in the program, none exhibited grades of 2.00 (C average) or better. In the fourth quarter of the program, seven students had better than a 2.00. Three additional had better than 1.80, probably indicating only one grade of D.

Three methods of evaluation were employed to measure the increase in appropriate school and social behavior emitted by Title VI students. First, the Walker Problem

Table III

Grade Point Averages

Computed by the following numerical point system:
I=0 A=4 B=3 C-2 D=1 F=0 U=0 S=2 N=0

	Quarter Prior	Grades While in Program			
Student	to Entry	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
1	0.67	––	––	1.80	1.33
2	0.00	––	––	2.00	1.83
3	1.64	––	––	2.00	2.33
4	1.20	––	––	1.75	2.00
5	0.50	0.83	1.00	0.40	0.83
6	1.33	––	––	2.60	2.33
7	0.00	––	1.75	2.00	1.83
8	0.75	––	––	1.20	1.50
9	0.83	––	1.00	2.17	1.33
10	0.00	1.20	1.80	2.50	2.33
11	1.43	2.00	2.00	2.57	2.43
12	1.50	––	––	2.17	2.14
13	0.50	––	0.80	0.29	0.50
*14	––	1.33	2.00	2.00	1.50
15	1.67	2.00	1.71	1.86	1.85
*16	––	––	––	2.00	2.00
17	1.75	2.71	2.57	2.29	2.14
*18	––	1.50	0.83	1.20	1.00
*19	––	2.00	2.00	2.20	2.00
20	0.00	1.50	1.67	––	––
21	0.33	1.33	0.67	––	––
22	0.00	0.00	––	––	––

*Designates 7th grade students who were placed in the program midway through the first 9 weeks grading period. At the time of placement all of these students were failing over half of their courses.

Table IV

Pre- and Posttest Results
Walker Problem Behavior Checklist
Mean Scores

		1		2		3		4		5		Total	
Student	Walkers	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	7/6	4.14	0.50	2.28	3.50	4.28	2.00	1.42	0.50	1.71	0.00	13.83	6.50
2	5/5	7.20	5.20	3.40	3.20	6.00	4.60	1.00	1.60	2.40	1.40	20.00	16.00
3	3/4	6.33	4.00	1.33	1.75	7.00	5.00	4.33	1.75	7.66	2.00	26.65	14.50
4	4/6	5.25	1.50	4.25	2.16	5.50	2.50	1.50	2.00	1.50	1.33	18.00	9.49
5	6/6	0.50	1.50	2.33	2.66	2.33	4.66	0.00	0.50	0.67	0.33	5.83	9.65
6	3/5	1.33	0.00	3.66	4.60	5.00	0.00	0.00	0.00	1.33	0.00	11.32	4.60
7	5/5	6.20	6.40	8.40	7.60	5.20	2.40	4.60	4.40	5.60	4.40	30.00	25.20
8	7/7	14.71	6.14	1.14	1.85	8.00	4.14	3.42	0.00	3.57	1.28	30.84	13.41
9	6/5	9.66	6.80	1.33	0.80	8.66	6.80	3.00	1.20	4.33	2.00	26.98	17.60
10	6/5	11.00	5.60	6.66	0.00	7.50	3.20	2.50	0.80	1.00	0.00	28.66	9.60
11	6/6	6.78	4.50	1.78	4.18	6.22	5.33	1.44	1.50	5.00	4.66	21.22	20.17
12	5/5	6.20	8.20	1.80	2.80	7.20	6.60	3.60	2.40	4.40	3.80	23.20	23.80
13	4/4	8.00	9.75	0.00	3.00	8.75	7.50	2.75	0.25	1.50	2.75	21.00	23.25
14	7/7	5.85	3.57	3.14	0.85	6.14	3.42	2.42	0.00	1.85	0.42	19.40	8.26
15	5/6	1.60	5.00	0.00	0.40	5.60	6.50	0.80	1.33	0.00	0.66	8.00	13.89
16	1/6	6.00	0.83	7.00	2.66	5.00	3.50	10.00	0.66	6.00	1.00	34.00	8.65
17	3/4	7.14	6.50	5.14	3.50	2.57	2.25	4.29	0.00	3.57	2.00	22.71	14.25
18	5/4	8.50	11.50	0.00	4.50	8.80	9.50	0.66	1.50	0.00	4.25	17.96	31.25
19	5/6	13.00	2.16	0.00	1.83	10.00	3.16	0.00	1.66	0.00	1.33	23.00	10.14

Behavior Identification Checklist was administered on a pre- and posttest basis. As seen in Table IV, total scores decreased in thirteen out of nineteen cases, remained nearly the same in two cases (students 11 & 12), and increased in four cases (students 5, 13, 15 & 18). These results become more meaningful upon examination of several comments made by teachers regarding the Walker Checklist. A large number of teachers stated that they felt they marked higher scores for students at the end of the year simply because they knew the students better and consequently had had more opportunities to observe samples of negative behavior. It was pointed out on numerous occasions that there were no places to mark increases in positive behavior which they had observed. In addition, a large number of Walker Checklists contained comments such as, "Has shown great improvement here" and yet the behavior was marked. Consequently, unless a negative behavior was completely eliminated in the teacher's eyes, the student's score indicated that he was emitting the behavior just as frequently as he had at the beginning of the year.

Examination of these data indicates that the project was highly successful with fifteen of its students but unsuccessful to varying degrees with seven students (students 5, 13, 15, 18, 20, 21 & 22). While their CTBS test scores increased, students 5, 13, 15 & 18 showed little improvement in grades, earned higher scores on the post administration of the Walker Checklist, showed decreased attending patterns (students 5 & 15, while student 13 increased to only 33%) (Table V) and their school attendance became poorer (students 5, 13 & 18). While these students remained in school for the entire year, the program found it necessary to expell and/or place in residential treatment centers students 20, 21, & 22.

It is of interest to note that all seven of these students exhibited extensive juvenile behavior prior to admission into the program and that they represented 10% of the program's seventh grade population, 50% of its eighth grade population, and 50% of the ninth grade population.

In conclusion, the data appear to support the contention of all those currently involved with the project, i.e., that the program as presently designed is much more effective with younger students who, while often more "disturbed," have yet to become involved in extensive acting-out behaviors against society.

3. To conduct counseling sessions designed to assist in the development of positive behaviors.

The practice of establishing contracts aimed at remediating specified behavioral difficulties provided the basis for counseling sessions. The behavior to be remediated was determined in a session with the student, Title VI teacher, and the project coordinator. A chart was kept of the student's behavior and was shown to him daily. These charts were examined and discussed in counseling sessions with the coordinator. An example of such a contract is shown in Figure 2. Figure 3 shows the results of the contract.

The establishment of group contracts was an integral part of all group counseling sessions. As noted earlier, weekly or biweekly "minor" field trips were used to reinforce appropriate behavior in the project classroom. Charts were placed in the project classroom and were discussed at group meetings. When one problem area appeared to be solved, the group would determine the next behavior on which to focus. Examples of field trips are: a picnic (7 students); a trip to OMSI (9 students); a trip to the zoo (9 students); numerous trips to Farrels and Shakeys; class parties (including Halloween, Thanksgiving, Christmas, Valentine's Day, etc.); and frisbee and football games in the park.

In addition to these procedures, frequent crisis counseling sessions were held. Role playing (especially fruitful in group meetings) and family counseling were also employed by the Title VI coordinator.

4. ***To provide parents with training in behavior modification techniques and to assist them in applying these techniques.***

Table V

Observations From Title VI Tracking Sheet
Percent of Time Attending
Eliciting "Appropriate" Classroom Behavior

Student	Pre	Post
1	33%	80%
2	25%	97%
3	44%	91%
4	67%	88%
5	50%	42%
6	99%	95%
7	15%	66%
8	57%	77%
9	42%	85%
10	45%	85%
11	79%	63%
12	75%	90%
13	20%	33%
14	64%	96%
15	82%	55%
16	67%	96%
17	95%	100%
18	44%	77%
19	82%	84%
20	79%	---
21	60%	---
22	37%	---

All parents were required to take part in an evening parent group meeting for a minimum of ten sessions and to attend biweekly conferences with the Title VI coordinator. A requirement for student entry into the program was that the parent(s) sign statements indicating agreement to such participation. Parents were informed that their child would be dropped from the program if they failed to follow these guidelines.

Parent attendance at both group meetings and individual conferences was excellent. The format for initial group sessions included discussion of a problem which the parents were having at home and the establishment of a behavior modification program to deal with it. Subsequent meetings focused primarily on examining and discussing program results. In only 25% of the cases did parents actually collect data and present it at group meetings. The remainder of the parents simply discussed the program and the results it was having.

While actual data collection in a greater number of cases would have been desirable, it was not required. This policy was followed because the staff felt that excellent parent attendance and enthusiasm was of high priority and should not be sacrificed in order that parents be required to present data. It appeared that several parents would have stopped attending groups if data presentation were required. Given the severity of the consequences for such action and the enthusiasm and willingness to discuss problems and projects shown by these parents, the decision was made to make data collection and presentation optional.

The extent of involvement with parents and professional agencies can be seen in Table VI. These numerous contacts provided a strong and positive link between the school, the home, and the community. Questionnaires completed by key staff in the junior high indicate enthusiastic support for the program. Eleven questionnaires were completed by parents and also indicate a high degree of support for the program.

Figure 2

Example of Student Contract

Title VI Contract
(Out-of-Seat Behavior)

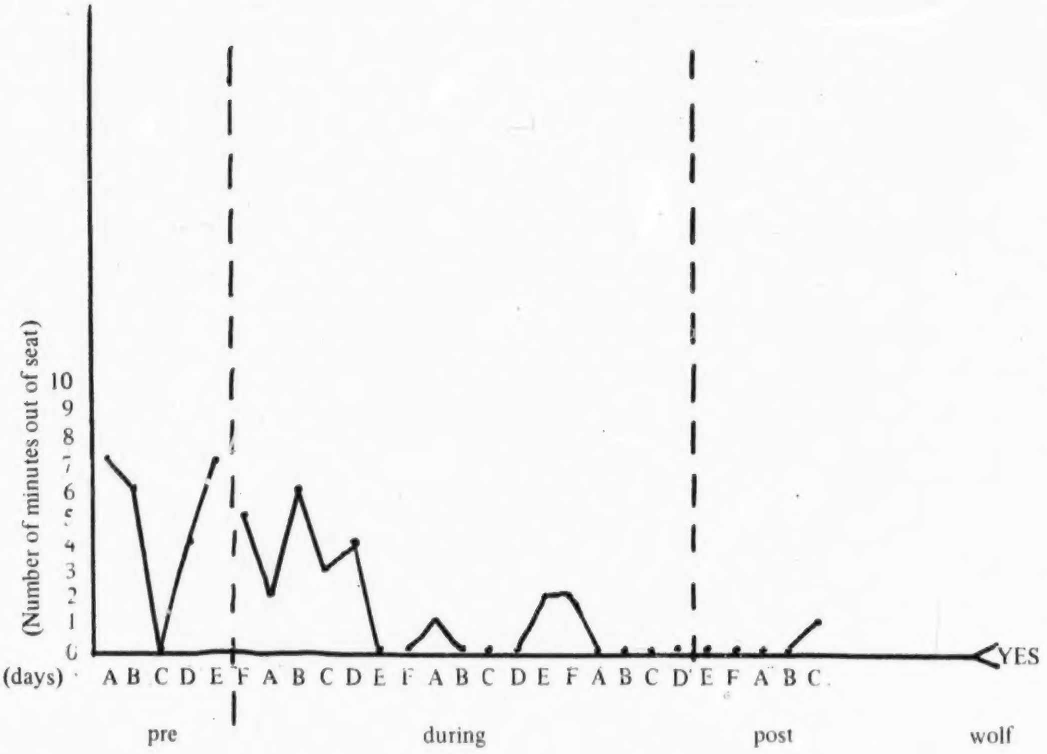
Mrs. NaSmythe will clock – on a stop watch – all time that ____ is out of his seat in room 19 when he should be studying. After every 2 consecutive days that ____ has earned zero minutes for out-of-seat behavior he will have a choice of purchasing a set of decals, a box of caps, or a section of sizzler track.

Student (Signed by Student)
Teacher (Signed by Teacher)

Figure 3

Results of contract between student and teacher.

2 consecutive days of zero = choice of: decals
caps
sizzler track



5. ***To insure successful reintegration of project children into a regular school program.***

During the current year follow-up on project students consisted primarily of observations of student behavior and staffings headed by counselors or the Title VI coordinator. Follow-up was aimed at providing teachers with continued suggestions for dealing successfully with the student. Given the fact that students had been placed in the classroom for only five months during the project's first year, that several of the students had moved, and that several more continued in the project, extensive follow-up procedures were not attempted. However, an intensive follow-up of all previous Title VI students has been planned for the spring semester of 1973. The program will then have been in existence for two and one-half years.

6. ***To continue revision and refinement of the present model for the education of emotionally disturbed children within the structure of the regular junior high school.***

Significant changes in the model included the following:

a. Diagnostic academic data were used as a basis for placing students in a highly individualized academic program. This program included placement with specially trained classroom teachers; remedial reading; speech therapy; and classes in writing, English, and math taught by the Title VI staff.
b. High-powered reinforcers – "major" field trips, were added to the already existing rewards of free time, early dismissals, and pop in order to increase student effort in academic areas.
c. With two full time personnel in the project classroom (a teacher and an aide), the project coordinator was able to spend more time working with teachers to plan individual behavioral programs for each student. In addition, the increased personnel enabled the project teacher to spend more of her time coordinating the student's academic program.
d. The extensive use of the contract system provided an acceptable, high-powered method of reinforcing appropriate student behavior. While many students and parents expressed resentment regarding the use of tokens and points, the contract method was readily

accepted. It provided the student with an opportunity to become involved in his own treatment program on an adult level – something very important to junior high school students.

e. The use of video tape feedback as a means of changing student behavior was a strong addition to the program. As indicated in Figures 4 and 5, this procedure was quite effective when specific, often childish, behavior on the part of the student required remediation.

f. The video tape was also used as a means of providing members of the Title VI staff with feedback on their classroom behavior. While no specific data were collected, the team found this tool to be valuable in altering negative, inconsistent, or other inappropriate teacher responses.

g. By requiring parent involvement and significantly increasing the number of contracts made with parents and professionals within the community the program was able to have a consistent effect on a much larger portion of the student's total environment.

Table VI

Total Parent and Professional Contacts*

Student	Total Parent	Total Professional
1	40	4
2	58	12
3	25	---
4	2	---
5 & 6	72	15
7	78	9
8	63	10
9	75	---
10	57	25
11	80	7
12	40	---
13	58	42
14	86	---
15	37	---
16	35	---
17	4	---
18	109	---
19	46	---
20	65	24
21	62	24
22	20	12
TOTAL	1112	184

*Includes all recorded phone conversations, home visits, school conferences, evening conferences, and parent groups. Does not include a substantial number of contacts (perhaps 10%) which either Title VI teacher or coordinator failed to record.

7. ***To train and retrain regular classroom teachers to use behavior modification techniques.***

Funds were available to teach only one course during the current project year. This course was given to twelve teachers and three teacher-aides at Heights Junior High School where the project classroom is housed. The primary instructional goal for the class was to aid teachers in working cooperatively with students in establishing academic and behavior goals and to determine the rewards for reaching these goals. Teachers were required to collect data on similarities and differences between teacher and student goals and concepts of reinforcement. Teachers were then asked to engage in a project where mutual goal setting and determination of rewards and punishment were established with a student or group of students.

Most teacher training took place on a one-to-one basis as the Title VI coordinator worked with individual teachers in establishing behavioral and academic programs for Title VI students. The project staff feels strongly that more intensive training in a structured situation is needed, especially at the junior high school which does not have a project classroom. Rather extensive funding for such training was requested and received for the 1972-73 project.

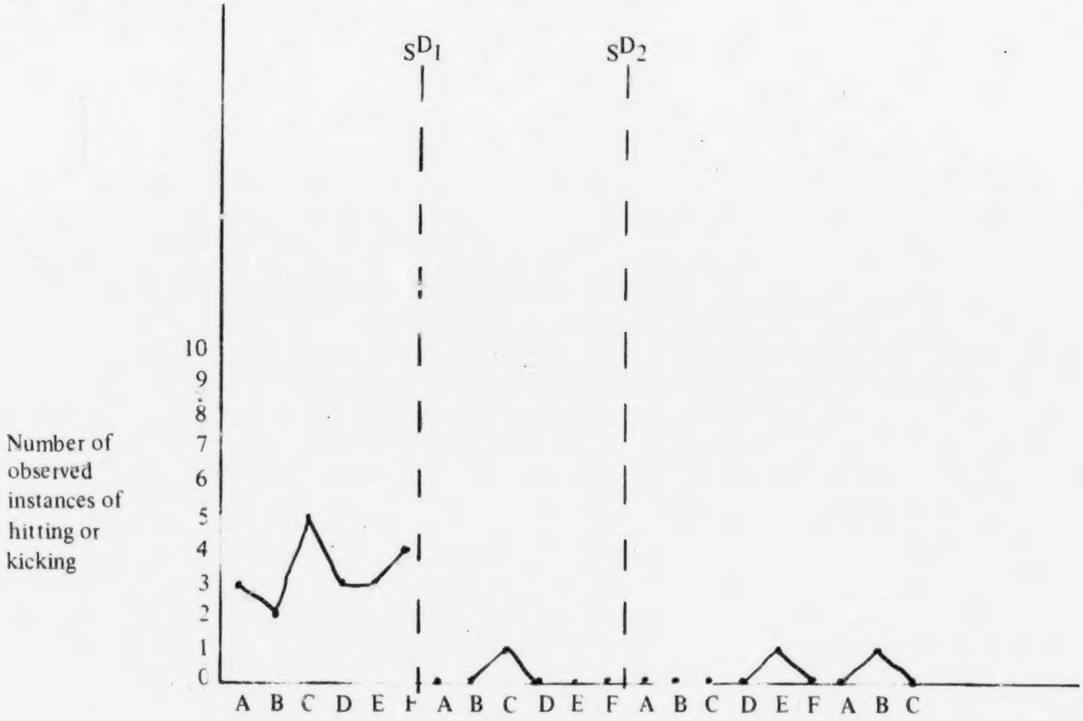
Third Party Evaluator's Comments:

This was a highly organized and well conducted Title VI project. Probably the major reason for the expert manner in which the project was conducted was the quality of the project director, Dr. Vern Jones. As one examines the statements of the staff at the high school, one is impressed that almost without exception from principal to counseling staff to teachers all praise Dr. Jones' ability to coordinate programs for the students among the regular classroom staff, the special staff, the administration, the parents, and the community. The final report prepared by Dr. Jones was a complete and excellent example of the quality of report that is desired in a Title IV project.

This is the second year in which this project has been funded at the junior high school level at Parkrose. It is interesting to refer to the Third Party Evaluation Comments of last year. They are repeated in part here for the statement still applies:

> "The third party evaluation team wishes to express that it recognizes the fact that remediating behavior problems at the junior high school level is a major undertaking, for these are behaviors which the child has learned over a number of years and which undoubtedly will be more difficult to extinguish. Moreover, it is recognized that these inappropriate behaviors significantly interfere with academic progress and probably have been so doing for many years thus making academic remediation

Figure 4



Days of Cycle

S^D 1 Student shown two 5 minute video tape segments involving his hitting and kicking another student.

S^D 2 Student shown two 10 minute segments of himself involved in appropriate work behavior and appropriate peer interactions. This was followed immediately by the student being taken to lunch.

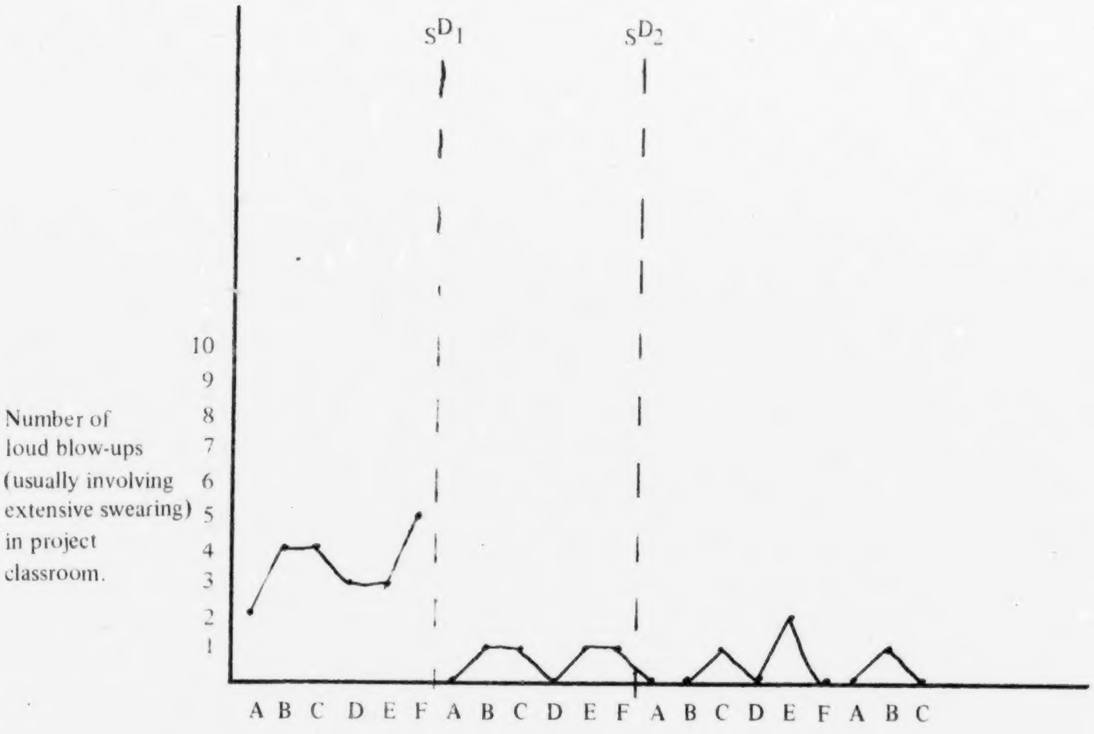
> more difficult. Therefore, to achieve total success in all cases is a highly ambitious undertaking."

The project director maintains that the data submitted indicate that the project was highly successful with fifteen of its students but unsuccessful to varying degrees with seven students. Three of these seven students had to be expelled and/or placed in residential treatment centers. Four others showed only marginal improvement in academic performance and in behavior. However, these students on whom the project has had success makes this project a worthwhile endeavor. Grades apparently increased not only to an acceptable degree, but to such an extent that the students that had maintained that performance could well be accepted into a state institution of higher learning.

Little more can be said about the three children who were expelled.

However, more needs to be said than has been mentioned in the results section about the four students about whom the project staff feel they have had little success. In almost each case, there is evidence to show that some gains were made with these children, and considering their age and the difficulty with which behavior modifiers throughout the country have had with this age group, the project staff should take encouragement from the gains manifested. For instance, student 5 showed gains in all four of the areas tested in the California Test of Basic Skills, language mechanics, language expression, arithmetic computation, and arithmetic concepts. Admittedly, the gains in academic grades were discouraging, although slight gain is manifested. The increase in Hill-Walker Behavior Problem Checklist scores is not considered important in this particular case since the child's total scores both in the pretest and the posttest indicate a child who is not manifesting major difficulties. Likewise, student 13 shows large increases in the four areas mentioned in the California Test of Basic Skills, as shown in Table I. Student 13 has also shown a thirteen per cent increase in classroom attending behavior, although it is still a relatively low percentage. Student 15 has shown gains in three of the four areas tested in the California Test of Basic Skills. In addition, his grade point averages for the four quarters

Figure 5



S^D1 Student shown a 10 minute video tape segment on one of her outbursts.

S^D2 Student shown a 15 minute video tape segment which included an outburst and its effect on others (the classroom was scanned during her outburst) and a segment of the student involved in appropriate behavior (classroom again scanned.)

while in the program show an increase over the quarter prior to his entry into the program. Admittedly, these increases are not large and they still fall slightly below the 2.0 grade point average, but they are close enough to 2.0 to provide encouragement. This child also has scores on the Hill-Walker Behavior Problem Checklist that are low enough to begin with to indicate a lack of serious and consistent problem. For student 18 there is some evidence of improvement. For instance, one should refer to Table II and notice the improvement in basic reading vocabulary and improvement in general comprehension. Both of these are sizable increases. Admittedly, this does not reflect in his grades. And certainly the scores achieved on the Hill-Walker Behavior Problem Checklist are discouraging. Yet a thirty-three per cent increase in attending behavior, as manifested in Table V, together with the increased reading scores presents an encouraging sign.

The above analysis does not mean that the third party evaluator believes that the project was successful with these children; on the contrary. Yet, the third party evaluator must attend to the spotty evidences of success being shown, and one must speculate about how successful the project might be if given a little more time with these children. Perhaps that evidence will come in during the next academic year since the project has been refunded.

A major weakness as perceived by the third party evaluation team lies in the area of parent participation. Certainly no one can fault the attendance of the parents at the group sessions. However, the purpose of the parent program was to teach parents behavior modification. It is difficult for the third party evaluation team to understand whether or not that teaching was accomplished and whether it did any good without the collection of data. Admittedly, data can be adversive to parents. However, it has been the experience of the third party evaluation team that without data collection, which can be greatly simplified for parents, one can only hazardly guess as to the effectiveness of a behavior modificiation instruction program. It is believed that more efforts should have been made in "shaping" parents into collecting data with their children. It is believed that once parents learn to count behaviors and count effects that the very success that is demonstrated by their examination of the figures encourages them in the application of behavior modification procedures. That parent attendance would fall off if parents were required to collect data is questionable, especially if parents were gradually introduced into data collection and were reinforced heavily for it. Moreover, it is believed that the aversive consequences of the child being removed from the program would help encourage the parents to gather data. Only eleven parent questionnaires were examined. They all indicated that they were pleased with the program and that it really was worthwhile. One would like to examine the questionnaires of the other seven parents whose children remained in the program. Such data might indicate further improvements in the parent education aspect of the program.

All in all, however, the third party evaluation team can do nothing but compliment and congratulate the staff of the Title VI project at Parkrose. We repeat that we believe it was a well conducted, well organized and effective program.

Title of Project:	*Classroom Experience for Multiple Handicapped Children Living in a Nursing Home Environment*
Location:	***Our Lady of Providence Child Center, Portland***
Type and Number of Children Served:	***15 Multiple Handicapped***
Funding Allocated:	*$14,899*
Project Beginning Date:	***September 1, 1971***
Project Ending Date:	***August 31, 1972***

Background and Rationale:

At the present time there is little available to preschool age children in a residential setting anywhere in the state of Oregon. The program described herein is for multiple handicapped children in need of a nursing care program. The children served are from the state as a whole rather than an individual school district. The determination is to provide as intensive a program as possible for each child in a setting for multiple handicapped children in a 24 hour residential care facility.

Objectives and Evaluation Plan:

1. ***To provide the opportunity for each child for further awareness and familiarity with his environment, adeptness in social skills, increased independence in practical living and all manner of experiences which would help stimulate the child.***

The Activities of Daily Living Skills Scale were to be utilized on a pre- and posttest basis. TV tapes were to be prepared on the performance of each child and a description of the activities undertaken with each child was to be included.

Methodology:

The coordination of the program is on an individual basis for each child. Recommendations for stimulation and speech therapy are made by Crippled Children's Division, Physio and Occupational Therapy Clinic and Multiple Disability Clinic of the University of Oregon Medical School. Children are currently being studied and followed regularly at these clinics and receive a reevaluation at scheduled intervals.

The project employs a Montessori teacher and provides Montessori equipment to help stimulate and develop multiple handicapped, nonambulatory young children in a 24 hour residence at Our Lady of Providence Children's Nursing Center. Emphasis is placed on practical life experience, stimulation and sensorial development. The child's full potential, whatever it may be, is realized as much as possible.

The Foster Grandparent Program provides aides to the program and the Montessori teacher works daily with the foster grandparent to provide the necessary training so that she can effectively assist the teacher. The physical therapist is the other key person working in the program. Her activities are coordinated with the activities of the teacher in providing therapy to maximize the potential of the child.

Parent involvement is not possible because of the distance and/or the emotional inability to maintain such involvement. However, as parents are able to participate, opportunity is provided for them to observe and acquaint themselves with the techniques used.

Results:

1. ***To provide the opportunity for each child for further awareness and familiarity with his environment, adeptness in social skills, increased independence in practical living and all manner of experiences which would help stimulate the child.***

Motor tests and Activities of Daily Living Tests adapted from the University of Oregon Medical School, Crippled Children's Division, were administered to all of the children on a pre- and a posttest basis, the results of which are shown in Table I. An examination of the first three columns labeled Lower Extremities, Right Upper Extremities and Left Upper Extremities indicated that twelve of the fifteen children for whom pre- and posttest scores were achieved showed gain in all three areas. These gains may be considered to be quite small in some cases, but one must constantly consider the profound degree of handicapping conditions which many of the children are exhibiting (see the discussion under each individual child below). Pre- and posttest scores reported on the Activities of Daily Living indicate gains for all children where testing was completed.

Since the major focus of the program was Montessori oriented, each child must be discussed individually and in light of Montessori techniques. One should keep in mind that the Montessori philosophy does not force the child to undertake new tasks in any of the areas, although the opportunities for the child to undertake these tasks and instruction in them are available.

Student 1. Chronological age: 6 years, 10 months (July, 1972). Diagnosis: congenital rubella.

Due to the transfer of this child to Fairview Hospital and Training Center in February, 1972 posttest measures were not obtained. While in the program, work on ambulation was accomplished both with crawling or scooting and using a walker. Problems were encountered in that the child consistently scooted backwards in the supine position and moved backwards in his walker. Progress was also made in self-feeding and sitting with support.

The Montessori teacher reported that the child was working with sensorial apparatus at the time he left. He could take the cylinder blocks out with help. He would shake the sound box if it was placed in his hand and held there.

Student 2. Age: 4 years, 9 months (July, 1972). Diagnosis: microcephaly, atonic quadraplegea, severe psychomotor delay.

This child was also transferred to Fairview Hospital and Training Center in April, 1972. Therefore, posttest evaluations were not accomplished.

Programs were started for sitting and feeding. She could sit unsupported for two to four minutes and learned to hold a spoon but would not use it.

Very little was accomplished with Montessori due to the child's nonattending to the apparatus that was presented to her. She concentrated on putting in her mouth anything that was placed in her hand. She worked with the cylinder blocks and the sound boxes with complete help.

Student 3. Age: 2 years, 11 months (July, 1972). Diagnosis: hydrocephalus.

At the start of therapy in October this child could roll over from front to back easily. He could sit by himself for five seconds and was using his left arm to straighten himself out when falling. He had poor head control. By the end of the project period in July his strength had increased to the extent that he could sit in a chair or lie prone and hold his head steady indefinitely. He was also able to drag himself around on a shag rug. The fine coordination of the left arm had improved to enable him to pick up a pellet with a precise pincer grasp and to turn single pages in a book. His verbal language improved with the addition of many new words to his vocabulary.

He left school in January, 1972, four months after he started. He did quite well for the short time he was there, working independently with the cylinders and sound boxes.

Student 4. Age: 7 years, 1 month (July, 1972). Diagnosis: hydrocephalus and myelomeningocele.

At the beginning of the program this child was placed on a tilt table in standing casts three times a week. She also worked on sitting in her chair, sitting on the floor, rolling over and moving about on a tummy scooter or crazy car. Towards the end of March a straight sitting jacket was obtained for her which enabled her to sit erect for extended periods of time without tiring. Progress with the use of upper extremities is reflected in Table I.

Due to significant increase in this child's concentration span and this being her fourth year in school, advanced Montessori apparatus was presented. She learned the names of all of the colors and was able to match to identical color tablets. She learned the alphabet and could give words starting with each letter. She also successfully worked with numbers using number rods.

Student 5. Age: 2 years, 6 months (July, 1972). Diagnosis: gross metabolic disorder.

Considerable improvement in ambulation was noted for this child in the therapy situation. He crawled, used a ring walker and learned to pull himself to a standing position and walk around holding on to furniture or people. This improvement is reflected in Table I.

In January, 1972 this child went to a foster home. A follow-up test in June indicated that progress continued in eating, mobility, dexterity, socialization and receptual language.

Student 6. Age:5 years, 8 months (July, 1972). Diagnosis: hydrocephalus.

When this child came to therapy he was using a wheelchair because of recent surgery for a shunt placement. In less than two weeks he had regained his ambulatory status, but wore a helmet due to his unsteadiness in gait. He was introduced to stairs activities and accomplished going up much faster than coming down. He was started on toilet training and showed gradual improvement. By the end of the project he still did not imitate going to the toilet on his own.

Training time was lost for a period due to illness and isolation with shigella. Many training steps had to be repeated when he returned from isolation.

He did very well with Montessori Sensorial activities and the exercises of practical life. He learned to count to ten and could recognize and give the names of the numerals one to ten, placing them in order. His speech improved and his vocabulary increased.

Student 7. Age: 5 years (July, 1972). Diagnosis: myleomeningiocele and hydrocephalus.

Due to numerous shunt revision procedures this child's progress had "ups" and "downs." He has use of only his right arm and hand. He feeds himself but needs some help drinking. He moves from one place to another by rolling over and over. Very little progress in training was accomplished.

He did not respond very well to new apparatus presented to him in the school situation. He would manipualte objects that he is familiar with, such as cylinder blocks and fabrics of different textures.

Student 8. Age: 4 years, 3 months (July, 1972). Diagnosis: probable intracranal frontal lobe cyst.

Table I

Pre- and Posttest Motor age Results of Motor and Activities of Daily Living Test from University of Oregon Medical School

Student	Lower Extremeties		Right upper Extremeties		Left upper Extremeties		Activities Daily Living	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	4	–	10	–	10	–	18	–
2	5	–	6	–	7	–	8	
3	3	5	2	3	8	15	16	36
4	–	–	18	25	18	25	44	56
5	12	20	9	10	9	10	23	40
6	22	23	18	18	4	8	54	60
7	4	5	10	12	2	2	29	30
8	5	9	8	9	8	9	13	23
9	5	9	2	9	2	9	16	27
10	5	–	8	–	10	–	19	–
11	6	7	3	7	6	8	25	33
12	–	–	6	9	6	7	16	24
13	4	–	6	–	3	–	23	–
14	9	11	24	21	15	23	48	56
15	2	3	2	2	1	2	13	15

Both the teacher and the therapist reported that working with this child was difficult due to her nonattending to stimuli around her. The therapist initiated a program to increase attending while at the same time working on sitting balance. Although the data reported shows very little improvement with this program, the therapist did not feel it was totally representative of the child's general increase in motor development. Observations indicated that there was much carry over into free play activities.

After experimenting with different apparatus the teacher presented this student with sound boxes. She would not look at these boxes but would shake them if placed in her hand. Gradually, she began attending to them until finally she would initiate use of the boxes.

Student 9. Age: 2 years, 2 months (July, 1972). Diagnosis: congenital hydrocephalus.

Progress in physical therapy was recorded for this child in three areas: self-feeding, ambulation and sitting in a chair.

A feeding program moved the child through steps of simply holding a spoon to complete self-feeding. Progress was slow but consistent use of the program resulted in using a spoon and a cup.

Crawling progress began with the child dragging himself across the floor with his arms and resulted in four point contralateral crawling. The child also learned to walk with adult support and sit unsupported.

The teacher reported that musical instruments were the only objects that this child would attend to for any length of time. Cylinders would be removed independently but then thrown on the floor. Some manipulation of fabrics was noted.

Student 10. Age: 5 years, 9 months (July, 1972). Diagnosis: cerebral palsy with spasticity and retardation.

Programs consisted of daily exercises to his feet, ankles and toes. Shoes were prescribed to prevent tight heel cords. Some progress was noted in feeding and sitting. However, posttest data was not obtained due to the child leaving the project in February, 1972.

Student 11. Age: 6 years, 6 months (July, 1972). Diagnosis: hyperurcemia; secondary cerebral palsy.

Physical therapy programs were implemented with reported success in self-feeding, walking in a ring walker and sitting without support on the floor. Towards the end of the project the child developed behaviors which hindered therapy (e.g., head banging) so activities were dropped.

School activities for this child included numbers, language and colors. Working with his hands presented a problem due to his spasticity. He also worked with sensorial apparatus. From February until the end of the project he learned to remove the cylinders independently.

Student 12. Age: 5 years, 4 months (July, 1972). Diagnosis: retardation of unknown etiology.

At the beginning of the project period this child would not hold any objects with his hands, preferring to move things with his feet. Programs were implemented in using a spoon and holding objects in his hands. Some progress was accomplished in these programs as indicated in Table I.

The teacher reported the above mentioned nonuse of hands as a problem in the classroom. Specifically, the child would throw anything handed to him. Some progress was accomplished with manipulating cylinder blocks.

Student 13. Age: 2 years, 7 months (July, 1972). Diagnosis: myleomeningiocele and hydroceplialous.

Therapy treatment for this child consisted of range of motion exercises and ambulation by crawling. Progress was observed both in this therapy situation and the Montessori classroom. The child expired in March of 1972.

Student 14. Age: 8 years, 2 months (July, 1972). Diagnosis: cerebral palsy and severe mental retardation. Programs of dexterity through the manipulation of puzzles were implemented for this child in the therapy sessions. She also worked with sitting balance and weight support while standing on a tilt table. Success was recorded with these programs due, in the therapists opinion, to the changing of the child's attitude towards working on them.

Advanced materials were presented in the school including language and numbers. This was the child's fourth year in school and the teacher reported much progress.

Student 15. Age: 3 years, 3 months (July, 1972). Diagnosis: cerebral palsy.

The physical therapist reports the implementation of range of motion and head control programs with this child. However, very little progress was evident. Due to her physical involvement the teacher indicated that manipulation of apparatus was difficult for the child. Some work was accomplished with the cylinder blocks.

Third Party Evaluator's Comments:

When considering this project one must bear in mind that the degree of handicapping conditions of these children is severe and profound. These are some of the most seriously impaired children in the state and thus, progress with them must be measured in minute steps.

Added to the above mentioned conditions, it was learned by the third party evaluator that eight of the fifteen children contracted shigella, a particularly virulent, highly communicable bacterial diarrhea. This resulted in these children being isolated and out of therapy and the classroom for six to seven weeks during the project.

As one reads the progress reports of the teacher and therapist and considers the above information, one cannot help but consider the progress of these children as successful. Therefore, it is the evaluator's opinion that the project accomplished the objectives that it set out to achieve.

Title of Project:	*Linguistic Language Programming*
Location:	*Tucker-Maxon Oral School*
Type and Number of Children Served:	*33 profoundly deaf children*
Funding Allocated:	*$10,260*
Project Beginning Date:	*September 23, 1971*
Project Ending Date:	*June 15, 1972*

Background and Rationale:

Traditionally, preschool programs for the hearing impaired child have followed a "speech/speech reading" centered curriculum. The child has been taken to a clinic once or twice a week for tutorial instruction in speech and speech reading. The approach has tended to be highly analytical (sounds in isolation, syllables and eventually words).

Parental priorities have been understandably speech and speech reading. The auditory training activities have centered on environmental sounds and word recognition, with but little concern for development of language structure or patterning. Listed in order of priority, the following would be the component parts of most preschool programs: (a) Functional speech (elements, syllables, words); (b) Functional lipreading (words, commands) and (c) Home discipline.

Language objectives generally have been given a low priority due to lack of time and the accepted belief that such work was the responsibility of the formal educational programming which begins at the age of 4-6. While there have been a number of exceptions to this philosophy the general format of centers working with hearing impaired children and the priorities as expressed by parents have been highly "speech oriented," with a tendency to postpone any extensive concern for development of syntax and semantic language skills.

Over the past one hundred years three general approaches toward language programming for the deaf have evolved:

a. *Structured.* This approach gives priority to syntax. Stress is placed upon correct grammatical form from the beginning grades. The Fitzgerald "Key," Barry Five Slates, Wing Symbols and color coding are examples currently in use in a majority of residential (public and private) schools for the deaf.

   In oral schools language program is closely dovetailed with the speech curriculum. As the child progresses from speech elements to syllables to words and then into sentences, the language structure likewise expands from isolated words into simple sentences into more complex forms of expression.

   This approach has come under increasing criticism from linguists and language experts as being contrary to the natural language development steps of the hearing child. The rules are "imposed from without" rather than "adopted from within."

b. *Natural.* The Lexington School for the Deaf, in affiliation with Columbia University, developed a language approach termed "natural language." It reflects many of the tenets of John Dewey in that it is highly "experience" and "interest" oriented.

   Critics have maintained that it was too unstructured for use with multiple handicapped deaf and that it was inappropriate for educational programs lacking competent supervision.

c. *Language Arts.* As an increasing number of deaf children were enrolled in day classes attached to public schools, some districts elected to have deaf students follow the same language curriculum as their hearing peers. Some modifications were permitted but there was no specific pattern or format developed. Gentile's achievement score studies at Gallaudet College reveal no advantages as measured by traditional achievement scores.

Simmons and Van Uden are among those who have developed curriculums and teaching techniques which are now available for adoption by other institutions. Simmon's work has been done at the Central Institute for the Deaf, St. Louis, Missouri. During the initial years her work was restricted to the moderately deaf child. Most of these students have since been placed in regular public school settings with some supportive services of a speech therapist and/or a teacher of the hard of hearing. She is currently programming profoundly deaf children (90-110 db. loss) and initial results are encouraging. The possible impact on Oregon educational programming for the deaf would be of considerable magnitude.

During the past three years Tucker-Maxon Oral School has conducted an exploratory "action research" project involving four classes. Dr. Simmons conducted the initial in-service training, approved the methodology developed by the staff and has continued as a consultant as a resultant curriculum has emerged.

This project was designed to test the feasibility of implementing a linguistic oriented language curriculum into a school for the deaf and to measure the types and degree of change in receptive and expressive language in the preschool deaf child (0-6) under such a program.

Objectives and Evaluation Plan:

1. ***Compare the degree of progress of children being trained under the "linguistic language program" with that of those previously trained under the traditional analytical language method.***

This objective will not be completely attained during the course of the proposed grant. It is part of a five year longitudinal study being conducted by the school in the following areas:

a. *Comparison of functional speech.* Speech articulation test records administered twice yearly.

b. *Comparison of academic content.* Teacher plan books which describe texts and general format of presentation.

c. *Comparison of written language materials.* Previously accumulated materials are available for some of the children. These will be compared for variety of vocabulary, sentence structure and semantic development of those children currently in the experimental program.

d. *Reading level of library books.* School librarian is keeping a record of the number of books checked out on each grade level. This will be charted to determine a trend.

2. ***Determine suitability for use with deaf children of materials designed for children with retarded motor development: Developing Learning Readiness (Visual-Motor-Tactile); Getman and Associates; and Parkinson Program for Special Children (Follet).***

This objective will be evaluated by the staff. They will describe, define the difficulty, if any, in using the materials in the classroom with specific children.

3. ***Identify baseline and chart growth of current physical and language status of each child in the project.***

This should be carried out the first two weeks in September and the second and third weeks in May. Instruments to be used are: Degree of hearing loss – Audiometric testing; General maturation – Developmental Test of Visual Motor Integration (Berry), Psychoeducational Inventory of Basic Learning Abilities (Valett), Metropolitan Reading Readiness Test; Language level – Teacher assessment of language level based on classroom performance in informal situations. (Identifying behaviors to be grouped into four language levels for ease in checking – Intonation, labeling, telegraphing and Syntax Semantic Maturation.)

4. ***Determine baseline and measure changes in current beliefs and objectives held by parents concerning acquisition of language for their hearing impaired child.***

A Forced Choice survey would be given to all parents in the project. They would be divided into two subgroups – those whose children have not been exposed to any "linguistic" programming (N 12) and those whose children have been exposed to some training (N 31). Instruments will be administered the first week in September and the last week in May. Analysis of covariance would be used to determine significance of difference.

5. ***Develop and test effectiveness of Home Guidance program to assist parents in assuming major supportive role in acquisition of language skills by their preschool hearing impaired children.***

This program would consist of:

a. Bimonthly home visits to parents of children ages 0-4 (N-12).

b. Monthly meetings of mothers for group discussions.

c. Monthly meeting of fathers for group discussions.

d. Observations weekly by Supervisor of Home Guidance Program of parent/child activities over a 30-45 minute period. (Site would alternate between nursery room at school and home of child.)

e. Demonstrations by staff (live and on tape) of procedures and techniques in encouraging language development.

f. Assignments to parents by Home Guidance Supervisor to describe behaviors for each language level and suitable parental responses for each level.

6. ***Identify and summarize apprehensions, criticisms and suggestions received from parents relative to the language program.***

It is anticipated that some concern will result from the proposed postponement of any formal work on speech elements until the age of seven. The Home Guidance Counselor will keep a family log for each parent and jot down any pertinent comments during the course of the year.

7. ***Determine if beliefs and attitudes toward language acquisition correlate with parental communication with child.***

This will involve comparing scores on Forced Choice survey with a coded evaluation by the Home Guidance Supervisor and the Primary Supervisor. (Use of Coefficient of Correlation will be proposed.)

8. ***Determine extent of adaption of demonstrated language techniques from classroom into daily home routine.***

Parents whose children range in age 4½ through 8 will be included (N-31).

Monthly demonstrations by teachers will be conducted from September through January. Video tapes will be prepared for fathers. Mothers will be expected to observe in person. During monthly visits mothers will observe teachers demonstrating techniques and materials to implement language development which could be utilized at home. In May parents will be expected to demonstrate with child techniques currently being done at home.

Social communication at home and in the community will be determined by observations from parents and staff as recorded in quarterly evaluations of children.

Each faculty member will maintain parent log and chart progress, problems or comments. An Amidon-Flanders type checklist will be used for the final parent demonstration.

9. ***Determine baseline and chart changes in attitudes and preferred techniques and methods in language development as held by teachers of the deaf.***

A Weighted Rating Scale survey would be given to all Tucker-Maxon Oral School Staff Members. Random sampling of teachers at Mary E. Bennett School in Los Angeles, public school teachers from Salt Lake City, and the Regional Facility for the Deaf (Portland) would be used for controls. Testing would be conducted during the first week in September, 1971, and the last week in May, 1972. One way analysis of variance would be used.

The purpose of this objective is to measure the degree of change in attitudes and preferred techniques in methods of language development as held by Tucker-Maxon teachers during the 1971-1972 school year. It will partially test the effectiveness of the in-service language training program planned for the staff.

10. ***Identify and measure changes in frequency of techniques and procedures in language development activities during school year.***

Each staff member would be video taped three times – the second week in September, the first week in February and the third week in May. Each video would be of approximately 40 minutes in length. An evaluation team (Director, Language Supervisor, Primary Supervisor, Home Teaching Supervisor) would develop a summary sheet comparable to the Amidon-Flanders approach in teacher reinforcement. The sheet would contain procedures and materials already identified as effective in the "linguistic approach." Analysis of variance would be used to determine the significance of the differences obtained.

Behavior objectives in the language area would be compared and measured in September, February and May. This would permit evaluation of the abilities of the teachers to express the language program in terms of observable behaviors as well as to determine if staff members were sensitive to the progress and/or problems of the class members.

11. ***Determine degree to which staff members accept and expand spontaneous language expressed by class members during "nonlanguage" activities, e.g., lunch hour, recreation period, field trips and discussion periods.***

The purpose of this objective would be to identify the areas of change in language programming within the school and to measure the degree of change within each staff member.

Methodology:

This project was conducted from September 23, 1972 to June 15, 1972. Staff consisted of a project director, a preschool coordinator, a primary coordinator and the Director of the Tucker-Maxon Oral School. Ten teachers and 33 profoundly deaf students participated in the project.

The major purpose of the project was to compare the traditional analytical approach to teaching language to deaf students with the linguistic language approach. The ten classroom teachers were asked to change their teaching methods in order to incorporate the linguistic approach into their classrooms.

The eleven objectives of the project were viewed as "subprojects." A master timetable and current status worksheet were developed. Periodic review of the progress in each of the "subprojects" was conducted either within the Tucker-Maxon Oral School staff or in cooperation with a representative from Teaching Research.

Results:

1. ***Compare the degree of progress of children being trained under the "linguistic language program" with that of those previously trained under the traditional analytical language method.***

Comparison of functional speech. Speech intelligibility tests have been administered semiannually for the past three years. During the first two years phonetically balanced sentences prepared by the Tucker-Maxon staff were used. The last year saw a switch to sentences prepared by the Clarke School for the Deaf, Northampton, Massachusetts. The change was effected in order to permit Tucker-Maxon to compare speech intelligibility scores on a national basis in as much as the Clarke materials are being gradually adapted across the country.

Twice yearly a tape is made of each child reading from a randomly selected list of six unrelated sentences. Six auditors are assigned the task of writing down what they think each child has said. One point is given for each syllable with a word which was correctly understood. (The sentences all contain syllables. A percentage score is figured from the total scores of the six auditors.)

Of the twenty students studied in this part of the project eighteen showed improvement in speech intelligibility. The gains during the past year ranged from 5% to 55%. Table I represents the percentage of improvement and the number of students in each range of percentages.

Table I

Percentage Improvement	No. of Students	(n = 20)
-0 (loss)	2	
0 – 9	3	
10 – 19	7	
20 – 29	1	
30 – 39	4	
40 – 49	2	
50 – 59	1	Average gain 21.3%

Comparison of the scores for the 1971-72 school year with those of the previous two years was difficult due to the following factors: During the first two years errors were made in the composition of the judging teams. The scores varied widely due to wide variations in the listening ability of the judges. The range of scores obtained for each child by the judges varied more widely than did scores between children. By the third year a screening procedure had been developed which resulted in a more homogeneous group of judges. Also, as the student's speech improves, his percentage scores begin to level off. This is particularly noticeable when the score reaches 80%.

Comparison of academic content. In September, the project director compiled a vocabulary list of new terms introduced in texts of reading, science, social studies and language arts. These words were categorized into topic areas for kindergarten through third grade.

In as much as the linguistic language format stresses student initiated activities and teacher prepared materials, the vocabulary listings were used to compare the topics covered during the 1971-72 school year as compared with previous years when the curriculum was basically textbook oriented.

Some 2,500 vocabulary terms were categorized. Table II compares the vocabulary presented to students using the traditional textbooks and teacher developed materials.

An objective evaluation of the results is difficult to make. The project director and school principal felt that the faculty continued to feel insecure in relying upon student interests, teacher prepared materials and activities as the main sources of language arts input. The same reluctance was observed in science and social studies.

While the teachers had theoretically been "freed" from following the texts for suggestions as to topics to be developed, it appeared that many of them sought out previous curriculum guides for assistance.

Whether the percentage of comparable vocabulary would have remained at the 60% level if teachers had not felt bound to cover certain areas is open for discussion. That 40% of the suggested material from curriculum guides was not covered in the linguistic language approach could either be an item of concern (if the materials are essential for a basic education) or a reflection of inappropriate texts.

Comparison of written language materials. Using print-outs, homework assignments and teacher prepared materials from previous years, an evaluation of the types of sentence structure most commonly used was made.

During the first five years of schooling the majority of sentences presented to children were of a simple sentence type with three variations: Subject/Verb/Object; Subject/Verb/Adjective; Subject/Verb/Object/Adverb. There was little evidence of any conversational language forms and expressions were limited as to number and occurrence.

A comparison of teacher prepared materials prepared for the linguistic language curriculum revealed a marked change in the grammatical structure. Compound and complex sentences were used, beginning with four year old students. Colloquial expressions were often encountered and there was a general style of writing which more approximated "speech written down" than the formal style of previous years.

Sentence structures used in teacher prepared materials were charted from September through April. The four most common sentence structures used per class are found in Table III.

Table IV represents gains made by 14 students at the Tucker-Maxon Oral School using the teacher developed materials.

There were indications that during the year the faculty expanded their selection of sentence structures, increasing the number and complexity of the sentences used in teacher prepared materials.

Of even greater importance was the type of sentences utilized by students in their creative writing activities. Comparable materials were not available for previous years

Table II

Class	Vocabulary Programmed in Textbook Curriculum	Vocabulary Utilized in Linguistic Language	Percentage
Preschool	350	134	40%
Class I	317	182	57%
Class II	305	190	60%
Class III	315	180	57%
Class IV	420	259	60%
Class V	616	417	68%

so the evaluation was made between students at the beginning of the project and at the ending.

Reading level of library books. During the school year, the Multnomah County Library Bookmobile stopped twice each month. As children left the vehicle the project director charted the types of books being taken. Four categories were picture books, levels 1-2, levels 3-4 and 5 and above. Comparison of the numbers and levels between September and May are represented in Table V.

No trend appeared as to the number of books being checked out or the percentages within the four levels of reading. There were several variables operating which were not controlled. Several teachers desired to control the number of books being checked out, others helped select part of the number being checked out and others encouraged students to check out books according to topic rather

Table III

September		April	
Type	Number of Classes	Type	Number of Classes
SVP	6	SVO	2
SVO phrase	4	SVO phrase	3
SV	4	SV	—
SV phrase	4	SV phrase	3
SV adverb	3	SV adverb	2
SV SV	2	SV SV	—
Clause SVO	1	SVO SVO	3
		SVO clause	3
		SVO adv. clause	3
		Clause SV adj.	2
		Clause SVO	

Table IV

Student (Ages 7-10)	Type Token Ratio*	Number of Words Per Assignment		Subordinate Clauses		Suntactical Correctness		Mean Sentence Length	
(n = 14)		Sept.	June	Sept.	June	Sept.	June	Sept.	June
1	gain of 14	91	112	0	5	2.6	4.0	4.5	5.8
2	gain of 10	98	80	0	0	4.0	4.3	5.9	7.0
3	gain of 8	398	391	12	11	6.1	9.0	8.6	9.5
4	gain of 8	308	341	1	4	4.9	10.7	8.6	12.5
5	gain of 18	582	500	6	7	6.8	8.5	7.1	9.6
6	gain of 6	484	397	9	17	5.0	8.3	6.1	10.2
7	gain of 2			0	0	2.9	4.1	5.1	5.5
8	gain of 6			0	0	3.7	4.0	4.6	4.6
9	gain of 4			2	0	3.1	3.2	7.1	4.4
10	gain of 17			0	2	4.6	4.6	5.1	6.0
11	gain of 17			0	0	3.7	3.8	4.0	5.2
12	gain of 20			1	2	4.3	4.6	6.1	5.6
13	gain of 12			0	0	3.0	4.2	4.3	6.3
14	gain of 3			1	3	5.9	4.8	6.2	6.6

*Taking first 100 words, how many different words occurred.

Table V

Month	Picture Books	1-2	3-4	Above	Total
September	35 (13%)	106 (53%)	42 (25%)	18 (9%)	201
October	56 (13%)	225 (55%)	62 (16%)	68 (16%)	411
November	60 (12%)	238 (53%)	113 (25%)	45 (10%)	456
December	78 (18%)	180 (43%)	98 (25%)	59 (14%)	415
January	89 (22%)	207 (47%)	93 (21%)	45 (10%)	434
February	103 (25%)	228 (55%)	38 (10%)	43 (10%)	412
March	83 (20%)	211 (50%)	68 (16%)	58 (14%)	420
April	116 (25%)	183 (41%)	55 (13%)	94 (21%)	448
May	110 (21%)	235 (46%)	90 (17%)	80 (16%)	515

than reading level.

In as much as there was no common objective identified within the staff as to the single purpose of library books, it was felt unwise to attempt to control the checking out of books so as to permit complete student freedom.

One change of note, however, was the increase in books being checked out. There were a total of 2,619 books checked out by the students during 1970-71. The same number of students checked out 3,806 during 1971-72. Whether the linguistic language program had any effect on the increase was not determinable.

2. Determine suitability for use with deaf children of materials designed for children with retarded motor development: Developing Learning Readiness (Visual-Motor-Tactile); Getman and Associates; and Parkinson Program for Special Children (Follet).

The materials were originally placed in each classroom for use by the classroom teacher. During the year the faculty felt that some of the gross motor activities would be better done as part of the physical education program, allowing the teacher more time for formal language work.

One objective of the study was to determine the value of the materials with young (3-5 years) deaf children. The reports received from teachers included the following observations:

a. The materials did not identify those young deaf children with learning disabilities from those who were merely physically immature. The materials were not of diagnostic value.
b. In assisting unihandicapped deaf students to acquire visual-motor-tactile skills the materials were quite valuable.
c. For remedial work with children ages 6-9 the materials were used on an insufficient number to draw any conclusions. Some children appeared to have profited from the exercises while others showed little progress. Whether these children had additional handicaps has yet to be determined.
d. With young deaf children the tests did not differentiate between children with additional handicaps and those merely lacking in previous experience.

The materials did not assist us in determining which young deaf children were not ready for the linguistic language approach or which children should not be exposed to this type of language presentation.

3. Identify baseline and chart growth of current physical and language status of each child in the project.

Physical growth. The following tests were administered to determine the general maturational growth of students during this project:

The Berry test was administered in the fall and spring. The Valett test required between three and four hours per child to administer. Because of its length and difficulty in administration, its use was limited to those students felt to have multiple handicaps. The subtests of Language Development, Auditory Skills, Conceptual Skills and Social Skills were not administered because they proved to be too difficult for the age of deaf child being studied.

The Metropolitan Reading Test battery was limited to the Matching, Copying and Draw-a-Man subtests. Other sections required lipreading skills and/or specific vocabulary comprehension which were beyond the scope of the linguistic language research project.

The primary purpose of administering these tests was to assist the staff in early identification of students who would have difficulty in acquiring language through the linguistic approach. The tests did not identify between students who had language disorders from those with delayed physical development. The test scores tended to substantiate previously reported evaluations of staff members.

Language level. All children ages 3 through 12 were given a Language Assessment Evaluation in September, January and May. Staff members determined the language maturation level (expressive) of each student. At least three staff members participated in the evaluation of each child.

Expressive language was divided into four levels of sophistication: (a) Vocalization and Intonation; (b) Labeling; (c) Telegraphic; and (d) Syntax.

Each child was measured on the degree (Majority of the time, Some of the time, Seldom, Never) to which he/she relied upon this level of communication. Table VI represents the predominate level used by each child in September and in May.

4. Determine baseline and measure changes in current beliefs and objectives held by parents concerning acquisition of language for their hearing impaired child.

A Forced Choice survey and a Weighted Rating Scale was given to all parents (n=53) in the project. The instruments were administered during the first week in September and the last week in May. An analysis of covariance was to have been used to determine the significance of any differences obtained between those parents whose children were not in the linguistic language program and those whose children were being programmed in the linguistic approach. However, this was deemed inappropriate in as much as a number of t[illegible] parents attempted to answer the instruments according to what they thought the project director desired to hear.

The responses were anonymous but it was evident that a number of parents were not entirely "objective" in their answers. Several wrote comments on the instruments to that effect.

In September 91% of the survey sheets were returned. However, in spite of simplified directions, 30% were done incorrectly. In as much as the returns were without names it was impossible to correct the errors. In May, 72% were returned, 5% being improperly filled out.

There were few changes in current beliefs and objectives on the part of parents during the year. In responses parents

Table VI

Number of Children
(n = 48)

Vocalize-Intonation	September	May
Majority of Time	15	8
Some of Time	3	1
Seldom	2	0
Not used	28	39
Labeling		
Majority of Time	14	6
Some of Time	9	3
Seldom	1	0
Not Used	24	39
Telegraphic Speech		
Majority of Time	7	23
Some of Time	17	8
Seldom	8	4
Not Used	16	13
Syntax Developed		
Majority of Time	10	14
Some of Time	17	14
Seldom	6	6
Not Used	15	14

were quite reluctant to make priority decisions between speech and language objectives. It was evident that the majority of parents whose children attend Tucker-Maxon Oral School place high value on intelligible speech as well as correct language structure. That one may or should precede the other apparently was rejected by many.

Most families returned two copies of the survey sheets to the project director. While no attempt was made to identify fathers and mothers, an informal check of responses revealed a wide range of differences in values and priorities. In view of the comments from some parents that they were reluctant to make forced choices and that they "knew what they wanted," it seemed that any statistical analysis of the responses would have been of dubious validity.

5. Develop and test effectiveness of Home Guidance program to assist parents in assuming major supportive role in acquisition of language skills by their preschool hearing impaired children.

Bimonthly home visits. The Home Guidance Supervisor found that home visits often provided a different viewpoint of a family and a hearing impaired child than that gained through parent conferences held at the school. After several visits most families relaxed and made fewer attempts to manipulate the environment for the benefit of the Home Teacher. Although limited personnel may preclude its implementation, one recommendation was for periodic evening visits to meet with parents and hearing children.

A log was maintained of discussions held with each mother and father. At the end of the year the Home Guidance Supervisor prepared a summary sheet for each family to be placed in the cumulative folders in the office.

Monthly meetings for mothers. Midway through the year the Home Guidance Supervisor increased the number of meetings to two or three each month. The twelve mothers were scheduled for at least two individual consultations each month plus one group meeting. The discussions were scheduled between 12 noon and 12:40 p.m. This proved a most advantageous time as the children were eating lunch and the mothers were free to visit without interruption.

Monthly meetings for fathers. Of the twelve families, four of them were without fathers. In addition, three fathers worked out of town and were seldom seen. Group meetings did not materialize for the remaining five fathers so the Home Guidance Supervisor shifted to an individual conference approach using time just prior to or after the monthly P.T.F. meetings. This appeared to be a weak point in the guidance program. Fathers had not received the language orientation sufficiently in detail to be of any support to the mother or to be effective with the hearing impaired child.

Parent demonstrations. These appeared to be most successful when conducted in the school nursery room. The mothers appeared more relaxed and their language activities were more meaningful than those efforts made at their homes. By the fourth month most of the mothers were quite relaxed with the Home Guidance Supervisor. It appeared that most progress in parent orientation occurred when the parent was required to follow-up a discussion with a demonstration, applying the techniques or principles discussed.

Demonstrations by staff of procedures and techniques. During the fall several video tapes were made of procedures felt to be of value for parents. However, it was several months before the mothers began to profit from the tapes. There seemed to be a considerable amount of distraction in watching the children on television. It is felt that the use of video equipment has several advantages as soon as parents adjust to seeing themselves and their children on the screen.

The Home Guidance Supervisor demonstrated techniques in language stimulation, modeling, activity control and discipline. Parents were invited to discuss, comment and critique the activities.

Assignments to parents. Twenty topics were developed for parents. They were presented singly in an informal discussion period. A notebook was gradually built up. These topics were to provide basic information in causes of deafness, influence of a hearing loss on language development and parent participation in language experiences.

Parents were given an assignment at the conclusion of most of the bimonthly conferences. These assignments were individualized according to the current needs of the parent and the language level of the child.

Parents who had received prior orientation from other agencies tended to have difficulty in understanding the stress placed upon language input by parents and acceptance of speech approximations on the part of the deaf child. While they desired to have the child attend Tucker-Maxon, it was obvious that several families had priorities which were not in harmony with the linguistic language program. It was well into the spring months before these mothers were able to demonstrate language input, language conversation and language modeling sufficiently to insure the Home Guidance Supervisor that they could use these tools at home. However, it continues to be a question as to whether they are convinced of the efficacy of the priorities. We had underestimated the strength of the initial counseling and orientation from the other agencies.

At the end of the year, 8 mothers (66%) were providing adequate language stimulation to their deaf children. Four mothers (33%) continued to experience some difficulties.

6. ***Identify and summarize apprehensions, criticisms and suggestions received from parents relative to the language program.***

The Home Guidance Supervisor maintained a list of comments from the 12 parents under her preschool guidance program. Teachers were also instructed to write down any parent comments concerning language training and forward them to the project director. The teachers conducted two parent conferences during the year and the project director studied the parent comment sheets to obtain any input from parents concerning language curriculum. Parents were provided with opportunity to offer suggestions for improving the school. The school principal forwarded any contributions which were related to language training.

The following statements are indicative of the feeling of parents (n=33) who participated in this project:

a. Many parents continued to place a higher priority to intelligible speech than to comprehension of written and/or spoken language. This condition seemed fairly prevalent on all levels (ages 2-12).

b. There was a tendency for some parents to expect language comprehension immediately after initial language input. Many parents had several conferences with teachers before they recognized the need for a large number of input experiences before comprehension and subsequent language expression could occur.

c. Some parents of children ages 2-4 continued to be "one word" oriented. This condition had gradually disappeared by April and May.

d. Fathers had difficulty in providing adequate language models for their children. The mothers felt the school should require the men to attend demonstrations on language input. Apparently the wives had only limited success in sharing the techniques with their husbands.

e. By the end of the year 66% of the mothers were capable of modeling language patterns and obtaining a correct response from their children.

f. Lectures as to theory, procedures and techniques were of minimal value. Observations of techniques were only helpful if immediately followed up with parent demonstrations of the same procedures. The parents learned by doing – not by hearing or reading or watching.

g. Some parents had difficulty in arriving at the correct language level of their child. By December, however, most parents were performing this phase without difficulty. The major problem area tended to be in the level of language to which the child should be held for his expressive communication.

h. Teachers for the deaf have traditionally had little preparation in child growth and development as it applies to programming in schools for the hearing. The faculty would have been more capable of guiding the parents if their own professional training had provided insights and information in the area of language development of hearing children.

7. ***Determine if beliefs and attitudes toward language acquisition correlate with parental communication with child.***

The Forced Choice survey was administered on a pre-post basis to 33 parents. A comparison of scores on the Forced Choice survey with an evaluation of the parents by the Home Guidance Supervisor and the Primary Supervisor was to be made.

In preparing the initial Forced Choice survey in September it was felt that parents would be more objective if not requested to identify themselves. This feeling was justified for a number of parents experiencing difficulty in completing the Forced Choice survey and the Weighted Value Scale. Their personal bias was often in conflict with what they thought was the value judgments of the faculty and administration. Fortunately, the rapport was strong enough to permit verbalization of these feelings.

With the survey and weighted value instruments being turned in without identification it was not possible to compare these scores with evaluation scores of the supervisors.

Each parent was evaluated independently as to the observed degree of language structure in communication with the child at the conclusion of the project. The following is a result of that observation:

Communicating on adequate language level and requiring adequate language level response from child – 60% of parents;

Communicating on adequate language level but not requiring high enough language level response from child – 25% of parents; and

Experiencing difficulty in communicating on adequate language level and in determining maximum language level to be expected of child – 15% of parents.

8. Determine extent of adaptation of demonstrated language techniques from classroom into daily home routine.

Parents were provided with bimonthly demonstrations (Lower Primary) or monthly observations (Upper Primary) from September through April. During May parents were taped at school as they conducted a discussion period with their children. Parents brought their own materials.

The objective was to determine the interaction of spoken communication occurring between parent and child. An Amidon-Flanders type of checklist was developed. Two listeners judged each tape. Consultations were held until agreement was made on each response. (Tapes lasted ten minutes, judgments each half minute.) There were ten categories of interaction: (1) Acceptance by adult of the child; (2) Acceptance by adult of what child says; (3) Expansion by adult of what child said; (4) Asking of question by adult; (5) Lecture by adult; (6) Giving of instructions by adult; (7) Correction by adult; (8) Child talking with adult, adult having started conversation; (9) Child initiating conversation with adult; and (10) Silence/Confusion.

The two judges required more listening and evaluative experience than was provided prior to this phase of the project. Much time could have been saved if the judges had been experienced in using the Amidon-Flanders procedures. However, taping the parent-child discussions permitted replays if necessary.

The parents became quite formal when the microphone was placed near them. The majority overcame the self-conscious behaviors by the end of the discussion. However, it was felt that the microphone introduced a variable which seriously interfered with parental responses. The children were accustomed to using microphones during the school day and exhibited no problems.

The percentage of time spent in the ten categories of interaction were: (l) Acceptance by adult of the child – 1%; (2) Acceptance by adult of what child says – 19%; (3) Expansion by adult of what child said – 19%; (4) Asking of question by adult – 27%; (5) Lecture by adults – 2%; (6) Giving of instruction by adult – 4%; (7) Correction by adult – 4%; (8) Child talking with adult, adult having started conversation – 13%; (9) Child initiating conversation with adult – 10%; and (10) Silence/Confusion – 1%.

Adults were speaking 76% of the time, children only 23%.

These percentages approximate those obtained by Dr. William Craig in analyzing the communication interaction in classes for the deaf. (American Annals for the Deaf, March, 1970; pp. 79-85.)

In a study on communicative patterns within classrooms, Dr. Craig found that teacher generated communication accounted for between 70 and 80% of the time. Student generated responses amounted to between 20 to 33%. The question was posed as to whether the low percentage of student initiated communication was due to inability on the part of deaf students to generate communication, or failure of teachers to permit them an opportunity to participate. There were only slight differences between age groups.

9. Determine baseline and chart changes in attitudes and preferred techniques and methods in language development as held by teachers of the deaf.

A Weighted Value survey was administered to all Tucker-Maxon teachers in September and May. It was theorized that some changes in attitudes and preferred techniques would occur as a result of the in-service training being conducted in the linguistic language curriculum.

Controls were to be obtained from random samplings of teachers at the Regional Facility for the Deaf (Portland), Mary E. Bennett School (Los Angeles, California), and Salt Lake Extension Division (Salt Lake City, Utah).

An analysis of variance was to have been conducted to measure if the changes in Tucker-Maxon teachers were significant. However, arrangements with the Regional Facility (Portland) and the Mary E. Bennett School were changed to conform with policies which required that the teachers not be identified. After the September samplings were received the two control schools were notified not to keep a list of those participating teachers. The survey contained 100 items divided into three age categories, 0-3, 4-7 and 8-13. Thirty items were language oriented. The remainder were "distractor items."

The responses in September and in May by Tucker-Maxon faculty to the thirty-three items pertaining to language objectives were subjected to an analysis of variance to determine if the obtained differences were significant.

Not one of the thirty-three differences were significant at the .05 level. Only three items approached significance at the .05 level. They were:

Ages 0-3

Has intelligible speech for words of his environment. (The hypothesis was that this item would have a lower mean in May. While there was a lower mean, it was not sufficient to be significant at the .05 level.)

Ages 8-13

Recognizes phrases, expressions and certain vocabulary in formal classroom situations.

Ages 8-13

Applies rules of grammar in written work.

Therefore, it appeared that there was no significant change in language objectives for Tucker-Maxon Oral School teachers in spite of continued discussion, lectures and observations in the linguistic language approach. One possible explanation might be that only one of the nine faculty members began the school year in September without any previous exposure to current literature, observations and demonstrations on the linguistic approach. It might be concluded that the previous experiences had established their positions and the events of the school year did nothing to modify same.

Using the obtained means as a baseline a comparison was made between Tucker-Maxon Oral School and the three participating schools. Items were considered if the obtained mean was at least 1.5 higher or lower than the next school. (1.5 was selected because it appeared that it was at this point in the previous paragraph that the differences would have been significant.)

Only one item appeared in this category:

Ages 0-3

Keeping language patterns approximately same as for hearing child. (Tucker-Maxon staff rated this higher than the other three schools. This would be expected from the linguistic approach.)

It is, therefore, assumed that the language objectives and priorities of the Tucker-Maxon Oral School staff did not significantly differ from those of staff members in three "control" schools using traditional language approaches.

While the instrument may not have been sensitive enough to detect significant differences, the objectives included those of highest priority for both the traditional curriculum formats as well as the linguistic approach.

10. ***Identify and measure changes in frequency of techniques and procedures in language development activities during school year.***

Each staff member (n=8) was video taped three times – in September, February and May. An evaluation team (Project Director, Principal, Primary Supervisor and staff member) evaluated the presentations utilizing a checklist of procedures and techniques already identified as basic to an effective linguistic based language program for the deaf. There were twenty-two such procedures or techniques.

Comparisons between the three tapes revealed that the major differences were not in procedures but rather in the affective domain of attitudes, priorities and values. The teachers adapted their daily procedures to the prescribed format without too much difficulty. However, on viewing the tapes during the spring it was obvious that most of the teachers, as they became convinced of the advantages of the linguistic language approach, exhibited considerably more enthusiasm, conviction and positive reinforcement with the students than in the fall tapings.

An analysis of variance had been proposed to determine if the differences obtained were significant. However, the measuring instrument was not designed to measure the affective domain and it was felt that it was in this area that the major change occurred. Table VII represents the evaluation of the observation team of the eight teachers.

Behavior objectives in the language area would be compared for the months of September, February and May. This was designed to permit evaluation of the abilities of the teachers to express the linguistic language curriculum in terms of observable and measurable behaviors.

A checklist was developed to evaluate the behavior objectives written by each teacher for her class. The Project Director, School Principal and Primary Supervisor jointly evaluated each staff member.

Table VIII represents the evaluation of the observation team relative to the teacher's ability to write behavioral objectives.

Table VII

	September	February	May
Accepting of rationale for linguistic language programming but experiencing difficulties with procedures.	1	0	0
Experiencing difficulties in accepting rationale for linguistic language programming but experiencing no difficulties with procedures.	1	0	0
Experiencing difficulties with both rationale and procedures.	2	1	1
Has accepted rationale and has developed adequate technical skills in linguistic language development.	4	7	7

(The evaluation team viewed each video tape and then jointly assigned the eight faculty members to one of the above categories.)

11. ***Determine degree to which staff members accept and expand spontaneous language expressed by class members during "nonlanguage" activities, e.g., lunch hour, recreation period, field trips and discussion periods.***

A checklist was utilized by the evaluation committee to determine the degree to which staff members accepted and expanded spontaneous language expressions by class members during "nonlanguage" activities, e.g., lunch hour, recreation period, field trips and discussion periods. The

Table VIII

	September	February	May
Unsatisfactory behavior objectives because they cannot be measured.	2	1	0
Unsatisfactory behavior objectives because they were not within the linguistic language curriculum.	1	1	0
Unsatisfactory behavior objectives because of the manner in which they were expressed.	2	0	0
Adequate behavior objectives as to format.	5	7	8
Adequate behavior objectives because they can be observed, measured and are a part of linguistic language curriculum.	4	6	8

(Note: Totals exceed 8 as there were multiple listings for some teachers.)

Table IX

	September	February	June
Usually expands spontaneous language in "nonlanguage period" situations.	5	7	7
Usually models correct language patterns in "nonlanguage period" situations.	6	7	6
Usually requires optimum speech effort by child in "nonlanguage period" situations.	4	5	7
Occasional expansion of language in "nonlanguage period" situations.	3	1	1
Occasional furnishing of correct modeling pattern in "nonlanguage period" situations.	2	1	0
Occasional demand for better speech in "nonlanguage period" situations.	4	3	0
Seldom expands language outside of language period.	0	0	0
Seldom models language patterns outside of language period.	*	*	2
Accepts any type of oral response outside of language period.	*	*	1

members evaluated the teachers twice during September, twice during February and twice during June.

The following is a compilation of those three observations:

Third Party Evaluator's Comments:

This project has demonstrated many successes in achieveing the wide variety of objectives that were specified. In addition, much valuable information has been written in the final report which would be of unlimited value to other schools for the deaf whose administration and staff desire to change from a "traditional" to a linguistic approach.

The following summative statements can be made relative to the acquisition of some of the objectives:

1. The linguistic language curriculum did not appear to be damaging to the development of functional speech by children between the ages of 7 and 10. The average gain in percentage of functional speech was 21.3%. (Comparisons with previous years are subject to bias due to poor selection of judges.) (Objective 1a.)
2. There was a considerable expansion of sentence structures in the teacher prepared materials when compared with materials used in the traditional language programs of previous years. Younger classes were exposed to compound complex sentences rather early. (Objective 1c.)
3. a. During the course of the year there was a 10% increase in the use of new vocabulary as measured by the Type Token Ratio. (This increase could not be compared with previous years under the traditional language program due to lack of data.)
   b. Students demonstrated a rise in mean sentence length and number of words used in correct

syntax.

c. The mean number of words used correctly and the rate of growth in mean number of words used correctly for the Tucker-Maxon students, ages 7-10, was greater than those obtained by students, ages 12-16, in six residential schools. (Objective 1c.)

4. The visual-motor-tactile materials were deemed by the staff to be of value in providing experiences for unihandicapped deaf children. However, there was no evidence to support the hypothesis that the children would not have progressed as well due to maturation. (Objective 2.) No conclusions could be drawn as to the value of visual-motor-tactile materials with students ages 6-9 whose language development was below average. (Objective 2.)
5. Parents continued to hold to the language objectives and priorities they formed when their child was first diagnosed as deaf and they received the initial orientation by an agency other than Tucker-Maxon. (Objective 5.)
6. Fathers appeared to be reluctant to learn techniques and procedures from mothers. If fathers are to be included in the home language program, the school will be required to provide separate orientation for the men. (Objective 6.)
7. Sixty percent of the mothers became adept at the processing and modeling of desired language patterns by the end of the project. One third of the mothers continued to experience difficulty. (Objective 7.)

   Parents experienced considerable difficulty in understanding what was involved in "language input." Their priorities continued to be in the observable "language output" of their children. (Objective 7.)
8. Parents continued to occupy a disproportionate part of the "speaking time" in the home. The percentages were not statistically different from those obtained by Craig in programs using the traditional language curriculums. (These percentages may have been influenced by the testing situation.) (Objective 8.)
9. Tucker-Maxon staff members (with one exception) acquired the basic techniques of the linguistic language program by February. However, it required a longer period for them to become convinced of the value and effectiveness of this nonstructured type of language programming. (Objective 10.)

   Writing behavior objectives were mastered by all but one of the faculty by the end of the project. However, three of the staff required nearly six months to become proficient in writing of objectives which could be observed and measured. Some staff members experienced difficulty in continuing to expand the children's language and to offer correct modeling for students outside of the classroom. (Objective 10.)

The results of this project suggest that the use of a linguistic model for teaching receptive and expressive language to profoundly deaf children has a great deal of potential. Those incorporating such a model must be prepared for extensive staff and parent training.

The Third Party Evaluation Team wishes to congratulate this project staff for the thoroughness with which evaluation procedures were conducted and the clarity with which they were reported.

Title of Project:	*Preschool Program For Children With Special Needs*
Location:	*Portland School District Area II*
Type and Number of Children Served:	*25 Mentally Retarded, Emotionally Disturbed, Learning Disabled*
Funding Allocated:	*$28,000*
Project Beginning Date:	*September 8, 1971*
Project Ending Date:	*May 12, 1972. (One month early closure of all Portland schools.)*

Background and Rationale:

Very recently the urgent needs of residents in the Portland Metropolitan Southeast Area have come more forcibly to the attention of those in high places, both in city and county government and in the schools. Of late, few resources have been available to these communities especially in the form of welfare counseling services, family counseling services, adult education services, or young adult premarital counseling services. A study based on 1960 census information places this area in the lowest socioeconomic quarter of Multnomah County, with a disproportionate number of low income families, one parent families, low median number of school years completed, etc. Prior to the development of this project, the community has had no early childhood education for those numerous families now classified as disadvantaged. It is in this community setting that the project addresses itself in part, to the needs of handicapped children at the preschool level.

The Prescriptive Education Team, which is an interdisciplinary group approach to teacher, principal and parent support services, was organized specifically to work with exceptional children in the regular classrooms. It is intended that the classrooms will be used as laboratories for the study of how children learn, and the processes by which they learn.

The teacher is seen as the prime agent through which change can take place; and, with the help of members of the Prescriptive Education Team, many children diagnosed as exceptional are taught in regular classrooms.

However, children often have initial experiences in kindergarten and first grade which build in failure syndromes. Data support the notion that if early diagnosis and screening is effectively achieved at the preschool level, children can be provided experiences which afford better opportunities for initial success.

This project is designed to develop exemplary early childhood education for three to five year old children who have special needs. The information gained from early accurate diagnosis and screening of children will determine the point of departure in planning individual programs for each child.

Objectives and Evaluation Plan:

1. ***To have handicapped children advance in competency and skill.***

   Baseline data and subsequent data will be maintained. In addition, pre- and posttests will be administered. (CCD Developmental Progress Scale and PPVT.)

2. ***To include teachers, administrators and district personnel in the project.***

   The evaluation for this objective will be a summary of the extent and type of participation achieved.

3. ***To involve parents in the program.***

   The evaluation of this objective will be a count of the number of parents participating, the frequency of their participation and the type of participation rendered.

4. ***To have the school used by the parents for recreation and learning.***

   The evaluation for this objective will be a count of the number of times the school is so used designating the type of use to which the school was put.

Methodology:

A community survey made by Prescriptive Education Program personnel in the spring of 1971 further revealed the lack of available services in the area of early childhood education for children with special needs. A second outcome of the survey revealed evidence of a desire on the part of the community for such a program. The local school principal and project director decided that a needs assessment was warranted. The principal sent letters to every family having children attending his school while the project director contacted community agencies that might have knowledge of families with three to five year old children with special needs, i.e., Oregon Medical School, County Health Nurses, Welfare Workers, Social Workers, etc. The outcome of these efforts resulted in the identification of thirty-two families that had children who might benefit from the proposed program. These families were contacted by telephone to determine their interest in a preschool program for their children. Twenty-nine responded favorably and appointments were set up for home interviews. Psychological examiners from the Prescriptive Education Program Team conducted these interviews, at which time they not only described the program to the parents, but also compiled a developmental history of the child and administered the CCD Developmental Progress Scale. Anecdotal notes made during the interviews and during the administration of the test were used, along with the test results, to identify the areas of the children's special needs. The results of the developmental test was to be used as pre-program baseline information about the children. Additional information was secured from the families' physicians and community agencies that had previous knowledge about the needs of the children.

On the basis of the available information, the project director, two psychological examiners, a clinical psychologist, the preschool teacher and a diagnostic teacher staffed the proposed preschool candidates and arrived at a list of twenty children who demonstrated the greatest immediate needs. These children were diagnosed as learning disabled (12), educable mentally retarded (5) and emotionally disturbed (3), and were to constitute the preschool enrollment. During the course of the year, three of the families moved from the area and five additional students were enrolled in the program.

At the outset of the program the psychological examiner who administered the developmental test discussed each child's stage of development with the child's parents and responded to questions or concerns of the parents.

Children who were diagnosed as having speech impairments or delayed speech were scheduled for work on a regular basis by speech pathologists. The other disciplines represented on the Prescriptive Education Team were available as resource and support personnel in the classroom, at parent meetings and for parent workshops.

Dr. Richard Lazere, clinical psychologist with the Community Child Guidance Clinic, served as consultant to the program, facilitator at parent meetings and was available for individual and group parent counseling.

Ideas and suggestions were solicited from school district administrative and teaching personnel regarding the program's goals and objectives. Many observed and took part in classroom activities and parent meetings. All persons who had any contact with the program were automatically put on the program's mailing list and received all communications regarding the program's activities.

The program put great emphasis on parent and community involvement. Parents' needs and desires were reflected in activity planning and the school responded by making its facilities available for meetings, workshops and social activities.

The community services that contributed to the children and parents during the course of the year were the Multnomah County Health Nurses who helped in screening procedures and served as resource people for parents, and the Audiology Department of Portland State University that set up a screening clinic for the children and then maintained a summer program for four children who exhibited impairments.

The preschool class was conducted by a certified teacher employed through the Portland Public School Personnel Department; one full-time aide and a parent of an enrolled child who worked so effectively with the children that she was employed as a half-time aide. The efforts of this nucleus were extended by parent volunteers who were regularly scheduled into the classroom. Speech pathologists, beside working with individual children, designed activities that were carried out by parent volunteers. Reading specialists planned and conducted activities in the classroom with individuals and groups. Diagnostic teachers not only worked with children but were the source of supplementary materials that were incorporated into the teacher's program.

On the basis of test information, developmental histories, parent information and observation of the children, the teacher determined objectives for each child that were both appropriate and attainable in terms of the child's needs and development. Daily observations and anecdotal records were kept with the teacher, aides and parent volunteers involved in the data collecting process.

The parents were oriented to adopt the techniques and approaches modeled by the teacher and support personnel when working with their children in the home. Conferences were scheduled with the teacher aides and parents when necessary, and general meetings between the Prescriptive Education Team and the preschool staff were held to keep everyone informed about the preschool's progress and needs.

These activities were carried on within the context of the program planned by the preschool teacher. A varied program consisting of developmentally appropriate activities that offered experiences in perceptual motor, language, speech, music, number concepts, social situtaions and creative art expression was enriched by field trips into the community.

Dr. Richard Lazere would make weekly classroom visitations to observe and consult with the teacher, aides and parents.

Results:

1. To have handicapped children advance in competency and skill.

The CCD Developmental Progress Scale, like the Denver Developmental Screening Test, attempts to portray the functional developmental level of a child in a pictorial manner. Scoring a child's performance in the recommended manner results in a "profile" that enables the administrator to see at a glance the comparative levels of functioning in the areas of motor skills, communication-interpersonal skills and self-sufficiency skills. Examination of the scored instrument reveals, quickly and clearly, those skills below the general level of the child's development which for some reason have not emerged and require special attention.

In order to condense a large number of "profiles" for the purpose of growth comparison the following procedure was developed. Each section of the test contains five series of developmental tasks. The tasks are assigned "developmental ages" on the basis of research evidence that indicates that the scale item typically emerges within the general age level to which it is assigned. The criteria for selection of an item was that between fifty per cent and seventy-five per cent of children of that age level demonstrated the skill. If one point is given for each month of developmental age, a child who demonstrates all series of the motor skill tasks up to developmental age three would score 180 points. [Three (years) x twelve (months) x five (series of motor skills tasks).] An average developmental age on any section of the test could be arrived at by dividing the total score by five and then dividing the result by twelve. Since those involved in helping children develop are interested in what specific skills a child possesses and those that would be appropriate for him to develop, the "profile" is of greater value than a numerical score. (See Table I for Score Conversion Chart.)

Table I

Conversion Chart

Score	Developmental Age
30	6 months
60	1 year
90	1½ years
120	2 years
150	2½ years
180	3 years
210	3½ years
240	4 years
270	4½ years
300	5 years
330	5½ years
360	6 years

Table II shows the comparison of the pre- and posttest scores for the motor skills section of the test. Students 10, 11, 15 and 18 would not respond to the tester during the pretest situation. Student 11 is a "developmentally disabled" child whose capabilities are far below the rest of the students. Students 20 and 22 were not administered the pretest. Students 21 and 23 did not score as well on the posttest as they had on the pretest which may be attributed to the "test-environment." The tester reported "reluctant response" on the part of student 24, and students 12 and 25 would not respond.

Table III compares the pre and post scores on the Communication-Interpersonal Skills section of the test. Although students 10, 11, 15, 18 did not respond to the pretest situation, growth is indicated in this area by the evidence that they did respond to the posttest. The development of their ability to relate to an adult other than the teacher or the aide can be considered social growth.

Table IV compares the pre and post scores on the self-sufficiency skills section of the test. The incomplete scoring of this section of the test was due to the posttest being administered when most parents were not present. Because of the full testing schedule of the support personnel, retrieval of this information was not possible.

The validity of the scoring on this section of the test is highly dependent upon information supplied by the child's parents. Experience has shown that a parent's evaluation of his child's performance is often affected by his emotions and bias. For those reasons the pretest information was generally not accurate and the incomplete posttesting made the scoring of this section inconclusive. It is recommended that classroom experiences and activities dealing with the skills involved in this portion of the test be provided so that information elicited from parents can be validated.

In November of 1971 the speech pathologists suggested collecting more data in the area of language development. They proposed two instruments that might be used,–,the Daberon Screening Device for School Readiness and the Peabody Picture Vocabulary Test. Experimentation with the two revealed that the Peabody was preferable in terms of appropriateness, information gained and ease of administration. Each student enrolled at the time was administered the test.

The same test was administered on April 25, 1972. Table V shows a comparison of the results of the two test situations. The speech pathologists also used the Boston Speech Sound Discrimination Test as an auditory screening device.

During the course of the year a psychological examiner administered the Draw-A-Person Test, and two diagnostic teachers administered the Denver Developmental Test to the enrolled students. Most of the information gained from the administration of these tests was found to be duplication of information gained from the CCD, since the CCD Developmental Progress Scale contains a Draw-A-Person section and a majority of the skills tested on the Denver Developmental Test are found in the CCD. Many of the support personnel who administered the tests had not had a great deal of experience testing impaired children of the ages included in the class.

Prescriptive Education Team members have been involved in making task analyses of basic skills and concepts

Table II

Motor Skills Section of CCD

Student		Pre-Program Score	Post-Program Score	Conversion
1		126	168	+42
2		168	252	+84
3		126	162	+36
4		264	324	+60
5		204	216	+12
6		198	204	+ 6
7		222	288	+66
8		162	Moved 2/9/72	——
9		204	264	+60
10		No valid response	240	——
11		No valid response	96	——
12		15	Invalid response	——
13		228	240	+12
14		276	360	+84
15		No valid response	384	——
16		138	Moved 2/14/72	——
17		204	240	+36
18		No valid response	Moved 11/15/71	——
19		276	324	+48
20		Not administered	264	——
21		204	192	- 12
22	1/25/72	Not administered	228	——
23	1/26/72	300	288	- 12
24	2/28/72	240	228 (reluctant response)	- 12
25	3/29/72	114	Invalid response	——

that fall within their disciplines. The fruits of these efforts should prove beneficial when the program implements rate data collection as part of its evaluation procedures.

2. ***To include teachers, administrators and district personnel in the project.***

In order for the preschool program to eventually have some impact on the regular school setting, it was imperative to establish and maintain communication between the preschool and the regular school.

Mr. Cal Norman, principal of Lent School, regularly attended parent meetings and both he and his staff observed preschool activities from time to time. He has not only shown his enthusiasm for the project by assisting in the needs assessment procedures but has facilitated the extensive use of his school's facilities for the preschool class and related parent and community activities. He made available the Industrial Arts Shop and equipment to the preschool dads; and Mr. Hesgard, who conducts the school's shop program, served as an important resource person. The school library was also opened to the preschool parents through Mr. Norman's efforts. Mr. Norman, his teaching staff and custodial staff have all contributed to the receptive climate afforded the preschool program. Sixth grade students were scheduled in the classroom to read individually to the children. This activity proved to be beneficial to both groups. Responding to the reading contributed to the language and social development of the preschool children and the readers benefited in terms of self-esteem and self-confidence. Students in the Home Economics Program spent time in the preschool class putting to practical use knowledge they had gained regarding child care.

The kindergarten teachers of Lent, Whitman and Marysville Schools were consulted from time to time regarding common concerns about curriculum, equipment, materials and children's needs. If these are the people who eventually would be working with the preschool children, establishing rapport and doing some mutual planning with them makes educational sense.

Area II Superintendent, Dr. Don James, and Field Administrator, Lucile Brunskill, have lent administrative and moral support to the program. Mr. Orval Clawson, Special Education Specialist, has visited the preschool, attended meetings and has offered the assistance of his

Table III

Communication and Interpersonal Skills Section of CCD

Student	Pre-Program Score	Post-Program Score	Comparison
1	180	192	+12
2	216	240	+24
3	156	216	+60
4	252	324	+72
5	180	168	- 12
6	162	192	+30
7	192	252	+60
8	180	Moved	—
9	180	228	+48
10	Not valid	300	—
11	Not valid	90	—
12	180	276	+96
13	216	264	+48
14	264	336	+72
15	Not valid	372	—
16	156	Moved	—
17	180	186	+ 6
18	Not valid	Moved	—
19	276	312	+36
20	Not administered	324	—
21	174	176	+ 2
22	Not administered	252	—
23	300	324	+24
24	252	288 (reluctant response)	- 24
25	96	Not valid	—

office.

Since district teaching personnel are involved with their own responsibilites at the time that the preschool is in session, most of their contact with the program came as a result of attendance at parent meetings and written communication. Twenty-one district personnel, including support personnel from other areas of the city, have spent time helping or observing in the preschool classroom.

Mr. Jim Bow and Mr. Gordon Neideigh, principals of schools in adjacent communities, attended meetings at which Lent preschool parents participated. They were on the preschool participant mailing list and were able to follow the progress of the project. Both showed interest in early childhood education and, as a result, helped conduct needs assessments in their communities. On February 7, 1972, the Whitman-Woodmere Community Preschool for Children with Special Needs became a reality and served twenty-nine families for the remainder of the year.

3. To involve parents in the program.

The philosophy of the program embodies the concept of a real community-school venture. In order to foster a cooperative helping relationship between the school and the community it was imperative to demonstrate to the parents that our desire to have them actively involved in the planning and decision-making was sincere.

From the initial meeting parents were kept informed about aspects of the program that required attention. Letters that included the agendas of the meetings they scheduled were sent to every participant who had a child in the program or attended a meeting. By this procedure all participants, including those who might not be able to attend a meeting for some reason or another, were kept appraised of preschool activities. Their opinions and suggestions were solicited, and together the parents, support personnel and director would select a course of action from the alternatives proposed by the group.

An overall average of fifty per cent of the preschool children's families were respresented at general meetings. The parents not only scheduled their meetings but also determined the format and agendas. (See Figure I, General Meeting Attendance Graph.)

The following is a brief summary by Joan Mathis of the

Table IV

Self-Sufficiency Skills Section of CCD

Student	Pre-Program Score	Post-Program Score	Comparison
1	180	192	+12
2	276	252	- 24
3	168	Incomplete	—
4	192	Incomplete	—
5	228	264	+36
6	156	Incomplete	—
7	192	Incomplete	—
8	216	Moved	—
9	240	240	0
10	Not valid	240	—
11	Not valid	96	—
12	192	Incomplete	—
13	276	240	- 36
14	288	Incomplete	—
15	Not valid	Incomplete	—
16	168	Moved	—
17	180	240	+60
18	Not valid	Moved	—
19	372	312	- 60
20	Not administered	Incomplete	—
21	276	Incomplete	—
22	Not administered	300	—
23	348	336	- 12
24	336	Incomplete	—
25	102	Not valid	—

six week Behavior Workshop that was co-facilitated by Joan Mathis, Speech Pathologist, and Dr. Richard Lazere, Clinical Psychologist. This workshop, which involved six weekly meetings in addition to the participants' general meetings, was attended by fifteen parents:

> In individual conterence parents discussed various behaviors of their children which were causing concern in the home. Each parent then isolated a specific behavior to observe, planned interventions to effect change, chose reinforcements to use and developed methods of recording target behavior at baseline during and after intervention. Behaviors included: inability to remain seated and still during meals; refusal to comply with commands; hyperactive and running behavior on trips to the supermarket; and refusing to eat adequately at mealtime.
>
> During the observation period the parents recorded the number of occurrences of the target behavior, as well as the antecedent and consequent behavior when possible. From this data they obtained a baseline count and were able to plan various paradigms for interventions based on their observations of the antecedents to and the consequences of the behavior.
>
> Recordings of target behavior occurrence were made periodically to provide feedback as to the efficiency of the treatment and reinforcement for the parents. Weekly discussions permitted flexibility of the program as target behaviors could be evaluated and changes in the paradigm effected with minimum delay.

4. ***To have the school used by the parents for recreation and learning.***

The meetings, workshops and Dads' Nights referred to in the previous objective delineate, for the most part, the degree to which this objective has been achieved. Future plans include not only a continuation of these types of activities but also an expansion into the area of social functions.

Third Party Evaluator's Comments:

This project had the unfortunate experience of having to terminate one month early because of the closure of Portland Public Schools as a result of the money shortage for the fiscal year. This undoubtedly put an extra burden on the project staff to complete their posttest early. However, in light of these difficulties the project staff did diligently collect their evaluation information and organized them into a very well written final report.

Table V

Peabody Picture Vocabulary Test Scores

Student	PPVT Date	Score	I.Q.	PPVT Date	Score	Score Comparison
1	11/71	20	42	4/72	27	+ 7
2	11/71	38	94	4/72	39	+ 1
3	11/71	23	38	4/72	42	+19
4	11/71	56	118	4/72	60	+ 4
5	10/71	28	83	4/72	34	+ 6
6	10/71	34	97	4/72	36	+ 2
7	11/71	29	81	4/72	44	+15
8	11/71	32	85	Moved 2/9/72	--	--
9	11/72	34	97	4/72	39	+ 5
10	11/71	35	90	4/72	48	+13
11	No response	--	--	No valid response	--	--
12	11/71	21	77	4/72	37	+16
13	10/71	44	77	4/72	53	+ 9
14	10/71	50	100	4/72	57	+ 7
15	10/72	48	109	4/72	53	+ 5
16	10/71	6	31	Moved 2/14/72	--	--
17	11/71	16	36	4/72	27	+11
18	Entered 12/72	--	--	4/72	40	--
19	Entered 11/4/71	--	--	4/72	51	--
20	11/71	53	113	4/72	56	+ 3
21	Entered 1/25/72	--	--	4/72	45	--
22	Entered 1/26/72	--	--	4/72	43	--
23	Entered 2/28/72	--	--	4/72	44	--
24	Entered 3/29/72	--	--	No response	--	--

Objective 1 for the project had to do with increasing competencies and skills in the children. These were subsequently defined to include motor, communication and self-sufficiency areas. The test that was selected was the CCD Developmental Progress Scale. The test was administered to nearly all children both pre and post. However, some difficulties were encountered. The self-sufficiency part of the test relies on parental judgments and was considered by the project personnel as not being valid. Therefore, minimal information is available concerning the growth of the children in the self-sufficiency area. Using the conversion table supplied by the project personnel the average growth in the motor skill area for all children was approximately nine months. Using this same conversion scale the average growth in the area of communication is approximately six months. In the communication area the Peabody Picture Vocabulary Test was also utilized. However, the data that are reported are in terms of change scores. On the pre- and posttest, raw scores would need to be converted to mental age or other equivalents to allow any overall statements concerning growth in the communication area.

Related to this objective it would seem wise that in future years other standardized tests should be used to evaluate growth need in these areas. The selection of these tests should be carefully made to avoid the problem of parental judgment, difficulty in administration and student's acceptance, and they should be sensitive to small increments of change on the children's part. It is probably a safe guess that all children benefited from programs. However, there is a question as to whether or not the instruments utilized recorded all the changes that occurred. It should also be recommended that an evaluation design other than pre- and posttesting should be developed which would allow continual monitoring of progress and therefore aid in making academic decisions on a regular basis.

Objective 2 dealt with including other district personnel in the project. The project personnel should be congratulated for making every attempt to involve personnel from around their district in such a way as to increase communication between this project and others, and in general, establish better cooperation and coordination within the district.

Objective 3 dealt with parental guidance. Parent meetings were on a regular basis and the attendance data for these meetings was good. The major criticism of this objective would be the lack of parental involvement in the actual school programs in terms of volunteer help for working in the classrooms. However, one of the parent programs was a six weeks program in behavior modification which did have parents develop a program of their choice for their own child.

Objective 4 dealt with use of the school facilities by parents for recreation and learning. The project conducted

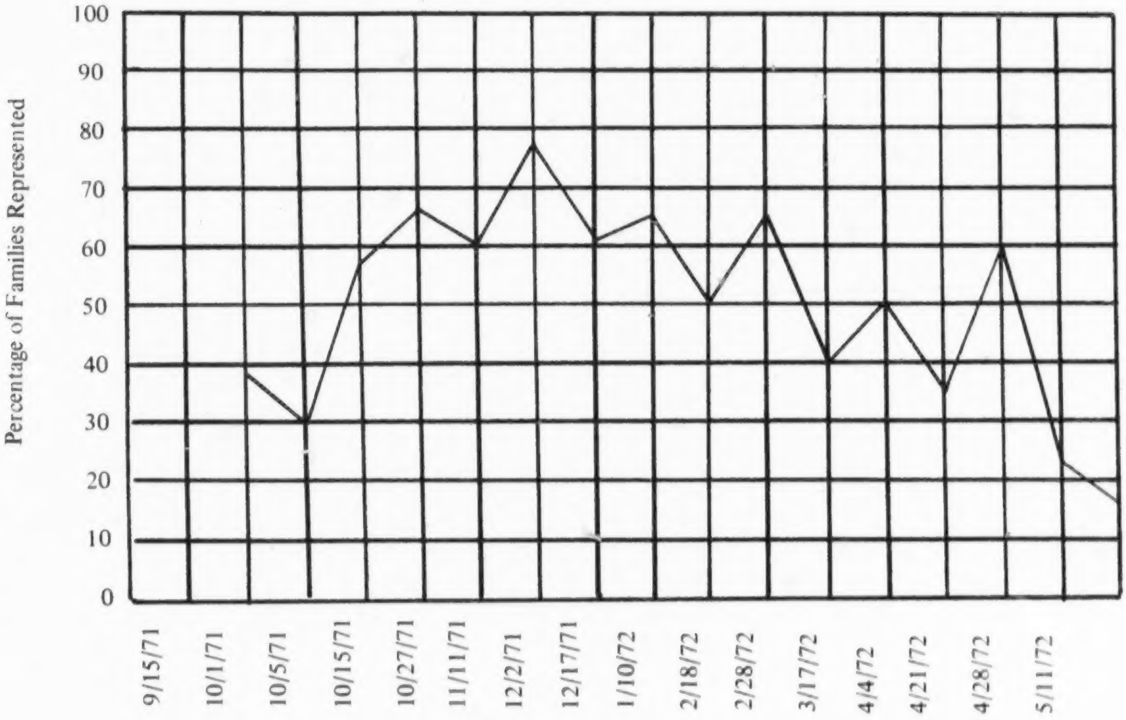


Figure 1

Line Graph Indicating The Trend in Parent Participation in General Meetings

several well attended meetings and undoubtedly provided a learning experience for the parents. There was also a great deal of cooperation with the school administration in terms of allowing these specific facilities to be used for other activities. Of particular interest was the Dad Night, which included making the shop available.

Objectives for the project were obviously met. However, the evaluation design in the academic areas should be changed in future years. Other types of evaluation procedures that were previously noted should be examined for their possible incorporation to allow more definitive statements concerning the impact of the preschool curriculum on educational activities.

Title of Project: *Speech and Language, Motor and Concept Development for Multihandicapped Preschoolers*

Location: *Holladay Center for Crippled Children, Portland, Oregon*

Type and Number of Children Served: *14 multiple handicapped*

Funding Allocated: *$11,918*

Project Beginning Date: *July 5, 1972*

Project Ending Date: *August 18, 1972*

Background and Rationale:

Holladay Center, through the project described herein, offered a program for multihandicapped preschoolers who have not had the advantages of educational and related services. Programs were offered in language, speech and concept development, physical and occupational therapy.

Objectives and Evaluation Plan:

1. ***Participating children will demonstrate improved ambulatory and/or movement skills.***

   The evaluation of this objective will be by the Gesell Developmental Schedule and/or another appropriate motor evaluation to be determined by the individual child's functional level and administered on a pre- and posttest basis.

2. ***Participating children will demonstrate improved speech and language skills.***

   The evaluation of this objective will be by the Peabody Picture Vocabulary Test and/or another appropriate language test to be determined by the speech therapist and administered on a pre- and posttest basis. Anecdotal records kept by the speech therapist for each individual child will also serve to evaluate this objective.

3. ***Techniques, procedures and recommendations will be developed and disseminated to district staff, parents and the Oregon Board of Education and other educational institutions.***

   The evaluation of this objective will be in two parts: First, a written report of techniques and procedures developed and/or used in this project; and secondly, a supplemental written report of recommendations for future district policy in dealing with preschool multiple handicapped children.

Methodology:

This project was conducted from July 5, 1972 to August 18, 1972 at Holladay Center for Crippled Children in Portland. It was designed to evaluate, treat and reevaluate developmental levels in motor, communication and cognitive skills.

The 14 children selected for the project were multihandicapped, including physically impaired, hearing impaired and language impaired. Their chronological ages were from 3 years to 7 years. Selections were made by the staff of Holladay Center from children living in the Multnomah, Clackamas and Washington County areas.

Assignment of staff members was made on the basis of ability and experience in working with physically handicapped children.

The project director, who currently is principal at Holladay Center, worked closely with the Crippled Children's Division of the University of Oregon Medical School and Hospital in the selection of the children for the project. She was the liaison between parents, staff and departments, and she maintained the administration for the project.

Two classroom teachers presented programs to develop basic preschool concepts. They also used Precision Teaching strategies to work with any inappropriate behaviors exhibited by the children. These teachers were the principal investigators of the study and, therefore, coordinated staffing for the project.

An on-going evaluation in speech and language was the responsibility of a speech clinician. She organized and administered the speech correction program.

Motor development and habilitation procedures were coordinated by a physical therapist. She was responsible for programs to help the children achieve their highest physical potential.

Equally important in working with motor development was the role of the occupational therapists. They were concerned with the activities of daily living and upper extremity motor development.

All disciplines had the services of attendants who were experienced in working with physically handicapped children.

Parents were informed initially of the program objectives. They observed the activities of the staff and participated in an on-going and postsession evaluation.

Results:

1. Participating children will demonstrate improved ambulatory and/or movement skills.

Programs in physical therapy and occupational therapy were implemented relative to attaining the above stated objective.

Physical Therapy. Each child was given a functional test to evaluate his motor capabilities. This test indicated the ability level and the method the child used to roll, crawl, sit, kneel, stand and walk. For the more handicapped children other tests were used to further understand and treat the child's disabilities. A motor test was given to pinpoint the child's motor age and thus help to evaluate what the child might be expected to achieve. The Cerebral Palsy Assessment Check indicates the amount of basic motor control the child has. In one instance a reflex text was given. A knowledge of normal and abnormal reflex responses was helpful in planning the treatment for a severely handicapped cerebral palsied child. The information gained from the tests was used to determine the place to begin each child's physical therapy program. Since the project covered a relatively short period of time, one area of concentration was selected and stressed in an effort to improve one functional activity in each child. The following general objective was written for physical therapy programs:

Objective:

To improve each child's ability to function in one physical activity – improved ambulatory and/or movement skills.

Activities:

Learning to walk in parallel bars with a pusher, with underarm and forearm crutches, without crutches, and improving sitting balance.

Nine children were involved in physical therapy programs during the project. Eight of those children learned to use a more advanced walking technique and one gained sitting balance. These programs and their results are more fully reported in Table I.

Occupational Therapy. An Occupational Therapy Evaluation Test was given to each child. Programs were then developed for the following general objectives: (a) to increase independence in activities of daily living; and (b) to increase functional use of hands and arms (coordination, strength and range of motion). Teaching strategies to meet these objectives included practice of skills in dressing, undressing and bathrooming, and teaching relaxation techniques and body alignment.

Relative to these objectives eleven children showed improvement in dressing skills; seven children showed improvement in toilet skills; one child showed improvement in body alignment through sitting with her head in a midline position; one child showed improvement in a program designed to increase the range of motion of the wrist; and one child showed grasp facilitation following thumb splinting.

2. Participating children will demonstrate improved speech and language skills.

Programs in speech therapy and a school classroom setting were implemented relative to attaining the above stated objective.

Speech Therapy. Each child was evaluated by the speech therapist to determine the areas of specific need to be worked with during the project period. The Peabody Picture Vocabulary Test (P.P.V.T.) was also used as a pre- and posttest evaluation.

Programs were developed relative to the following general objectives: (a) to modify prespeech activities; (b) to develop speech with language concepts; (c) to lengthen task attending behavior; and (d) to instruct parents in procedures for follow through.

Activities to modify prespeech activities included articulation therapy, relaxation, breathing exercises, speech musculature development by chewing, sucking and swallowing programs. A total of twelve programs were developed for five students. Goals set were attained for all of these programs.

Programs for language therapy were implemented for five students. Included were development of counting skills, identification of objects by visual memory, carrying out of auditory commands and naming the letters of the alphabet. Results of these programs are reflected in the P.P.V.T. scores reported in Table II.

Lengthening of attending behaviors was a task pinpointed for development with four students. Increases in attending ranged from 45 seconds to a minute, with a mean increase for the four students of 5 minutes.

Programs involving parent participation were reported by the speech therapist for four students.

Classroom Program. Programs were developed relative to the following general objectives: (a) the child will correctly name or point to the object/picture of the concept item, tell or gesture its use and obey the given command with 70% accuracy; and (b) the teacher will use Precision Teaching strategies to change inappropriate behaviors.

Concept categories and items most appropriate to a preschool curriculum were listed and ordered by learning priority according to Dunn (1968), Engelmann (1966), Frost (1968), and Montessori (1968). The Engelmann Concept Inventory was unavailable. A resultant four page informal inventory sheet included 245 basic concepts used in the pre-post assessment and instruction.

Concept sheets were developed by the teachers for use during group sessions. Individual instruction was provided if a child required additional experiences to attain the objective. Concepts were developed through activities in art, films, language, literature, music and science. When the objective was accomplished, higher level questioning strategies were used in an attempt to raise the level of response (relating, extending, reconstruction and predicting).

Table I

Physical Therapy Programs

Student	Objective	Treatment Strategies	Pre Evaluation	Post Evaluation
2	To return to walking with forearm crutches or canes.	Exercise to strengthen legs; ambulation in parallel bars; use of forearm crutches.	Would not bear weight following surgery.	Walked distance of 18 feet in one minute using forearm crutches.
3	To improve walking ability sufficiently to walk with forearm crutches rather than a pusher.	Instruction on standing balance; instruction on four point gait using forearm crutches.	Needed to improve standing balance; could not walk using forearm crutches.	Walked distance of 18 feet in one minute, twelve seconds using forearm crutches; uses crutches independently at school and home.
4	To change method of walking from walker to underarm crutches.	Instruction on four point gait using underarm crutches; use of board between legs to prevent legs crossing.	Moved in walker; did not use crutches.	Walked 30 steps without help using underarm crutches.
5	To become independent walker with the use of a walking aid.	Placed in a walker.	Used wheelchair; able to take a few steps from one piece of furniture to next.	Walked independently with the use of a walker.
6	To change ambulatory status from a nonwalker to walking with a walker.	Walking 18 feet per day using walker, placing feet on tape four inches apart on floor.	Able to take 6 steps with pusher.	Walked independently with walker.
8	To improve balance and take a few steps without crutches.	Timing the number of seconds standing unassisted in front of a mirror; counting the number of steps taken above.	Able to maintain standing balance 4 seconds; able to take 6 steps without crutches.	Able to maintain standing balance 40 seconds; able to take 16 steps without crutches.
10	To walk with a pusher; in order to do this must improve hand grip and walking balance.	Instruction on walking with pusher; work on standing balance in front of a mirror.	Moved from place to place by knee walking.	Walked distance of 18 feet in 28 seconds using a pusher.
12	To improve sitting balance.	Sitting cross-legged on a mat; using a chair without arms.	Could not maintian sitting balance on mat or chair.	Maintained sitting balance on mat for 90 seconds and on chair for 15 minutes.
13	To walk along in parallel bars.	Instruction on walking parallel bars.	Unable to stand alone in parallel bars.	Able to walk unassisted using parallel bars.

The progress of the child was discussed when parents observed in the classroom. At this time home activities and reinforcement procedures were suggested. Some home visits were made.

The Gesell Developmental Scale was used as a guide to organize Precision Teaching projects for behavioral manage-

Table II

Peabody Picture Vocabulary Test Scores

Student	Pretest		Posttest		Difference	
	I.Q.	M.A.	I.Q.	M.A.	I.Q.	M.A.
1	N.R.	2-2	N.R.	2-8	–	0-6
3	Could not obtain base		Moved		–	–
5	Could not obtain base		73	2-2	–	–
7	69	4-11	78	5-7	9	0-8
10	103	6-3	105	6-6	2	0-3
12	Could not obtain base		67	2-3	–	–
13	65	3-2	94	4-8	29	1-6
14	Could not obtain base		N.R.	2-8	–	–

N.R. = Not reported

ment. Through observation the most inappropriate behavior was pinpointed and a baseline was taken. Acceleration/deceleration strategies were listed and used in a treatment phase. Evaluation of data during the treatment phase indicated whether there was a need for a change in program or reinforcers. In the after treatment phase reinforcers were removed to observe maintenance of the behavior.

Results of language programs in concept development and behavior management programs are reported in Tables III and IV.

Third Party Evaluator's Comments:

The information that is provided by this project reinforces the concept of providing educational and therapeutic services for preschool multihandicapped children. Changes in specified behaviors were sufficient to indicate the necessity of providing such services for this population.

To be recognized in the evaluation of this project is the effect of the time constraints brought about by the project's duration. Since the total length of the project was six weeks, and since time was needed for establishing programs and final evaluations, very little time was left for providing services. The decision by the staff to concentrate efforts on a minimum number of specified behaviors allowed for a greater overall change in those behaviors.

The use of specified enabling objectives and daily recording of individual progress by the classroom teachers, speech therapist and physical therapist contributed greatly to achieving the stated project objectives. Monitoring student progress in this manner allowed for the most efficient use of the short time available.

The data reported indicate that objective number one was generally achieved. Individual records and progress charts submitted by the physical therapist document improved ambulatory skills which, hopefully, will be maintained. Improvements in movement skills were reported by the occupational therapist. However, a more objective recording and reporting system by the latter would have been desirable.

Improvement of language skills relative to objective number two is supported by the data from the classroom teachers and speech therapist. The teacher made inventory of preschool concepts appears to be an effective evaluation tool as well as a guide for prescriptive teaching. The incomplete reporting of the Peabody Picture Vocabulary Test, however, leaves some doubt as to the validity of these data. Other data reported by the speech therapist document improvement in language skills.

Additional changes of behavior recognized as complimentary to learning situations are also reported. The success of these changes is recognized. It is suggested that such changes need to be included in the proposed objectives for such projects.

Overall, this project would appear to be successful. Considering the time limits of the project, changes in the behaviors of multihandicapped children did occur.

Table III

Programs of Concept Development

Student	Teaching Strategies	Pre Evaluation (Concepts Correct)	Post Evaluation (Concepts Correct)	Difference (Concepts Gained)
1	Engelmann approach	108	152	44
2	Engelmann approach	162	215	53
3	Engelmann approach	47	84	37 (incomplete-moved)
4	Engelmann approach	72	146	74
5	Engelmann approach	117	175	58
6	Engelmann approach	90	160	70
7	Engelmann and Montessori approaches	188	242	54
8	Engelmann approach	178	205	27
9	Engelmann approach	184	207	23
10	Engelmann approach	201	243	42
11	Engelmann approach	49	137	88
13	Engelmann approach	163	228	65
14	Engelmann approach	90	180	90

Table IV

Classroom Programs of Behavior Management Through Precision Teaching

Student	Program		Baseline Rate Per Minute	Maintenance Rate Per Minute	Difference (+) or (-)
	Accelerate (+)	Decelerate (-)			
1		Talking off task.	0.6	0.2	-0.4
2		Resting on task.	0.4	0.0	-0.4
3	Meaningful verbal response to task or command.		0.2	0.6	+0.4
4	Verbal responses to task, command or person.		0.1	0.9	+0.8
5		Indiscriminate crying during group activity.	11.7	0.0	-11.7
6	Talking to another person.		0.0	1.0	+1.0
7		Talking off task.	1.4	0.2	-2.2
8		Stating unnecessary demands.	0.4	0.0	-0.4
	Talking to children.		0.0	0.4	+0.4
9		Talking unkindly to people.	0.2	0.0	-0.2
	Talking kindly to people.		0.0	0.6	+0.6
10	Pointing to wooden letters named to her.		8.2	26.0	+14.8
11		Demands for instant service.	8.8	0.2	-8.6
13		Demanding statements to adults.	3.2	0.0	-3.2
14		Looking and shouting off task.	11.5	3.0	-8.5

Title of Project: *Individualized Curriculum for the Severely Disturbed Mentally Retarded Child*

Location: *Shangri-La School, Marion County Intermediate Education District*

Type and Number of Children Served: *13 multiply handicapped (TMR – emotionally disturbed)*

Funding Allocated: *$18,000*

Project Beginning Date: *September 1, 1971*

Project Ending Date: *July 31, 1972*

Background and Rationale:

The project was undertaken at Shangri-La School because of the recognition of the need for a specialized program for certain handicapped children whose behavior is so bizarre and unacceptable in such a community based program that it usually results in their exclusion from any program at all. Often, if not nearly always, institutional placement is the result. Therefore, the intent of this project was to intensively work with thirteen severly disturbed mentally retarded children with the purpose of eliminating nonacceptable behaviors. A second purpose was to initiate the involvement of parents in the extinguishing of undesirable behaviors and the establishment of acceptable behaviors.

An overriding motivation in the conception of this project, and the original decision to submit a proposal, was to work toward and achieve the continuation of the community based program and to reduce the need for institutional care.

Objectives and Evaluation Plan:

1. ***To eliminate behaviors which are not acceptable in the regular classrooms for the TMR.***
2. ***To train parents to shape and record behavior in the home setting.***

The evaluation strategy to be used for both of these objectives is as follows:

- a. Determine the behavior to be modified.
- b. Record baseline data.
- c. Record all responses.
- d. Evaluate the effectiveness of individual programs.
- e. Determine effectiveness by comparision of baseline and subsequent recorded responses.
- f. Review of parent's recordings and parent-child interactions at home. (This was to be used for Objective 2 only.)

Methodology:

Individualized behavioral prescriptions based on the principles of behavior modification were developed for each student in this special program. An individually designed treatment program, including measurement techniques, was developed for each behavior that was pinpointed by the staff as being in need of modification. Overall there were 58 individual behaviors for which programs were written. Twenty-eight of those programs were attempted in a group setting and 30 of the behaviors were treated on a one to one basis.

The staff utilized four training areas in assessing group behavior, which included educational readiness, motor development, self-help skills and language development. The Student Progress Record (SPR), an instrument recording device utilized by the Mental Health Division, was used for eight of the children. Those behaviors which were worked on in the group setting included such things as eye contact, verbal interaction, spitting, pinching and temper tantrums. The number of individual programs within the group setting ranged from one to four programs per child.

The staff utilized individual assessment techniques for assessing behaviors on a one to one basis. Data collection on progress was conducted by each staff member on each child. Data were recorded weekly from a random sample of five minutes. These data were grafted weekly and reviewed monthly. Individual behavior programs on a one to one treatment basis ranged from three to eight programs per child.

The parent involvement portion of the project had as its intention the training of parents in behavior modification techniques, including observation and record keeping. This latter goal was modified shortly after the initiation of the project.

Each family was involved in a school conference early in the year. The purpose was to observe the facilities and give a general orientation to the program goals and procedures. This was followed with the project director calling on individual families in their homes. This latter approach was carried on throughout the duration of the project. The home visits were supplemented by telephone conferences and some involvement of parents in the classroom.

The staff felt that it was quite evident after the first home visit that the parents were not receptive to an involvement requiring record keeping. It was also the impression of the project staff that the parents were so overwhelmed by the child's behavior that preliminary involvement of a supportive nature was demanded before specific approaches and techniques would be effective. Therefore, the goals for parents shifted away from the original intent and were replaced by a general counseling approach.

Results:

The program served a total of fifteen children with no more than thirteen enrolled at any one time (seven boys and eight girls). The data that are described in this report are for those children who were enrolled in the program for at least six months. Since all programs and assessments were of an individual nature, the supporting data for the achievement of the objectives is reported by individual

1. ***To eliminate behaviors which are not acceptable in the regular classrooms for the TMR.***

Student 1. Student 1 was a 14 year old female that was involved in eight separate programs. Three of the programs were designed to extinguish or reduce existing behaviors and five of the programs were designed to strengthen or accelerate desirable behaviors. The three extinction programs were to reduce frustration or temper tantrums, tension and spitting. Data were collected in five minute samples for each of these behaviors and the baseline indicates that these behaviors occurred anywhere from six to sixteen times in the five minute samples. The last series of observations on each of these behaviors indicate that the final rate was zero; all three behaviors were successfully extinguished. The acceleration tasks consisted of attending, swallowing, eye contact and posture. Each of these behaviors increased dramatically with an eventual range from two to ten times, the frequency that was observed under baseline conditions. For example, in the area of eye contact the student was responding five times out of twenty to commands at baseline and was responding correctly twenty times out of twenty to commands by the end of the project. This would be an increase of four times the baseline rate.

Student 2. Student 2 is a 13 year old female who was engaged in eight programs. Three of the programs were geared at extinction and five of the programs were designed to strengthen or build new behaviors. The extinction tasks were for drooling, whining and temper tantrums.. Each extinction task was successful in reducing the behavior to zero by the end of the program. The acceleration tasks consisted of attending, swallowing, overt behavior and posture. An increase in each behavior was demonstrated. There was a slight increase in attending behavior, which was already four out of five correct responses under baseline conditions, to a final five out of five correct responses at the end of the program. In the posture program the student had a baseline of zero on a 15 second program and was finally able to demonstrate ten out of ten correct posture responses for 180 seconds by the end of the program.

Student 3. Student 3 is a 7 year old male involved in five programs. One program was designed to extinguish undesirable behavior and the other four attempted to strengthen desirable behavior. The extinction task was to reduce the number of times that the student was out of his chair, which under baseline conditions was thirteen times in a five minute period and was successfully extinguished to zero times in a five minute period at the end of the program. The acceleration tasks consisted of stimulating vocalization, a pre eye contact program, an eye contact program and motor imitation. On the vocalization program the baseline data indicate that the student was making approximately three vocalizations in a five minute sample, and by the end of the program the student made twenty-nine responses in the same five minute period with a high of 57 responses at one datum point in the program. Progress in the other three programs increased dramatically with the most significant change occurring in the eye contact program, where the final frequency of correct responses was eight times greater than baseline.

Student 4. Student 4 was an 8 year old male who was engaged in three programs. There was one extinction and two acceleration programs. The extinction program was designed to reduce temper tantrums and the baseline data indicate that for a five minute sample, nineteen inappropriate behaviors were occurring; on the last observation of the program this had reduced to seven inappropriate behaviors in a five minute period. However, there are several data points on the charts which indicate that occasionally during the program a zero level was achieved. The two acceleration programs were attending and eye contact. The data indicate that the behaviors increased from three to four times the baseline rate by the end of the program.

Student 5. Student 5 is a 12 year old male who is engaged in three programs. All programs were geared toward the extinction of undesirable behavior. The three programs specifically were temper tantrums, out of his chair, and talking out. Inappropriate behavior related to temper tantrums was occurring under baseline conditions at twenty times in a five minute period and were reduced to zero for the same five minute period by the end of the program. Out of chair behavior was occurring at a rate of thirteen times for a five minute period under baseline conditions and was also reduced to zero by the last observation in the program, with the chart indicating a dramatic drop to one or zero for a five minute rate immediately after the program began. Talk outs were occurring at fourteen for a five minute period at baseline conditions and were subsequently reduced to two talk outs on the last observation, with an average of about four or five talk outs during most of the program.

Student 6. Student 6 was a 6 year old female who was working on eight separate programs. Three of the programs were designed to extinguish undesirable behavior and five of the programs were intended to strengthen desirable behavior. The three extinction tasks were to reduce toilet accidents, decrease out of the chair behavior and to reduce inappropriate vocalizations. Toilet training data were gathered and plotted at two week intervals and indicate that the accident rate was eleven during this period under baseline conditions and reduced to eight on the last observation. However, the charts indicate that there were at least a couple of two week periods in which only one accident occurred. Out of the chair behavior was reduced ten times less than the baseline rate. The charts indicate that the inappropriate vocalizations were reduced significantly and appropriate vocal responses increased by six times the baseline conditions at one point in the program. The acceleration tasks consisted of the pre eye contact program, pointing to objects on command, motor imitation, eye contact and sitting at the chair. There was an increase in each behavior over the baseline conditions, with a range from two to ten times baseline rate for the various behaviors.

Student 7. Student 7 is a 7 year old male who is engaged in five programs, all designed to increase appropriate behavior. These programs consisted of stimulating appropriate vocalization, pointing to objects, motor imitation, pre eye contact program and an eye contact program. The vocalization program was successful in changing the behavior from a baseline rate of two in a five minute period to twenty-one on the last observation. The other programs were also quite successful by demonstrating that by the end of the program each of the behaviors was occurring from four to ten times more frequently then it was under baseline conditions.

Student 8. Student 8 is an 11 year old male who was involved in eight individual programs. There was one program designed for extinction of undesirable behavior and seven attempted to strengthen behavior. The one extinction task was termed by the project staff as "bugging," which essentially meant that the staff wished to reduce all inappropriate attempts by the student to get their attention. Under baseline conditions these inappropriate behaviors were occurring twenty-two times in a five minute period and were reduced to six on the last observation of the program. However, the chart indicates that there are at least five data points which indicated that this behavior occurred at the zero level for a five minute period during the program. The acceleration tasks consisted of holding his head up, appropriate vocal behavior, motor imitation, pre eye contact program, eye contact program and language program. The only program which has not yet reached the desired change was the one dealing with appropriate vocalizations, which is further defined as getting the student to stop whispering and speak up so that he could be understood by the staff. The data indicated that by the last observation in the program there was relatively little change from baseline conditions. However, at one point in the program the chart indicates that speaking out loud was occurring. This particular behavior of speaking out loud was eventually achieved by placing the child on another more structured language program with a final rate being at least ten times more than the baseline conditions. All other behaviors more than doubled baseline conditions by the end of the program.

Student 9. Student 9 is a 14 year old female who has five individual programs. All programs were geared towards strengthening desirable behavior. The programs consisted of stimulating the student to hold her head up, holding the head erect without stimulation, responding appropriatly to commands, pointing to objects, and a pre eye contact program. Dramatic changes were achieved in each program and are particularly significant in the area of head control. Her baseline data indicate that the student did not hold her head up at all without a lot of stimulation from the staff, and finally, it was occuring twenty out of twenty times when she was observed at the end of the project.

Student 10. Student 10 is a 10 year old female who worked on five separate programs. The programs consisted of one extinction and four acceleration tasks. The extinction task was concerned with the reduction of temper tantrum behavior. Baseline data indicate that for a five minute sample ten inappropriate behaviors were occurring, and that these behaviors were successfully modified to zero occurrances for a five minute period at the last observation in the program. The acceleration tasks consisted of eye contact, patience, and attending behavior. The programs were all successful with a particularly significant change occurring in the behavior referred to as "patience," which basically means being able to sit quietly between tasks. Baseline data indicated that she could not sit quietly for more than ten seconds prior to the initiation of the program, and the last recording indicated that she was able to accomplish this for 300 seconds.

Student 11. Student 11 is a 17 year old female who is involved in four individual programs. All programs were designed to strengthen desirable behavior and consisted of increasing vocalization, responding to commands, attending, and improving posture. All behaviors increased at least three times greater than baseline conditions, with the exception of the student's ability to respond to commands, which demonstrated the most exaggerated change. Baseline on responding to the command program was at the zero level at the beginning of the program and increased to twenty correct out of twenty attempts at the end of the program.

Student 12. Student 12 is a 9 year old female who was involved in seven separate programs. Two of the programs were designed to extinguish undesirable behavior and five of the programs attempted to increase desirable behavior. The two extinction programs were involved with reducing staring behavior and screaming. On the baseline observations for a five minute period the student was staring at the floor and not interacting with any one in the room for four and a half minutes out of the five. By the end of the program this was reduced to one minute out of the five. By the last observation there was a chart showing at least three data points during which no staring occurred at all. Inappropriate screaming was occurring at a rate of ten times during observation baseline and was significantly reduced to the zero level by the end of the program. Acceleration tasks consisted of increasing vocalization, a pre eye contact program, an eye contact program, command training and motor imitation. All programs demonstrated an increase over baseline rate that ranged from three to ten times the original frequencies.

Student 13. Student 13 is an 11 year old male who is engaged in six programs. Four of the programs are designed to extinguish undesirable behavior and two attempt to generate new behaviors. The extinction tasks consisted of reducing touching, hand waving, out of the chair behavior and talking out. The data indicate that each of these programs were highly successful and in all cases the behavior was reduced to an acceptable level for classroom performance. The acceleration tasks consisted of an eye contact program and motor imitation. The student was placed on an eye contact program which included twenty opportunities to respond correctly for each attempted program. The baseline data indicate that the first attempt on the program resulted in zero correct responses, but the student showed an increase of twenty out of twenty correct responses by the end of the program, with an average of about fifteen out of twenty responses during the program. The motor imitation program also allowed the student to make ten correct responses per step and baseline data indicate that this occurred four out of ten times. The last observation at the end of the program indicated that the student was now making five correct responses out of ten. However, the charts indicate that the student was able to achieve ten out of ten correct responses at various times during the program.

It should be pointed out that the data described here are in summary form and the individual charts are available for further observation from the project director. Many of the behaviors that were described in the preceding section were stated in very general terms (i.e. patience, frustration, etc.) but the reader should be aware that each of these behaviors has been described in behavioral terms and individual prescriptions, which allows for the direct measurement of that behavior.

2. ***To train parents to shape and record behavior in the home setting.***

This objective was not attempted and therefore not achieved. It was the staff's position that these parents were not ready to accept this type of training and therefore the type of involvement with parents was changed. Several home contacts were made by phone and in person and many of the parents came to the school.

Third Party Evaluator's Comments:

This program should be highly commended for its obvious success in modifying the behavior of several extremely disturbed TMR children. The project staff has demonstrated an outstanding ability to pinpoint and describe in terms that make these behaviors readily accessible to measurement procedures. They have also very carefully defined their treatment intervention programs and were able to document the impact in all cases. Another outstanding feature of this program was the staff utilization of evaluation information to aid them in decision making in assigning the various treatment programs throughout the duration of the project. On the basis of the data presented, there can be no question as to their successful achievement of the first objective.

The second objective, however, was not achieved. As a result of the staff's initial interaction with the parents it was determined fairly early in the program that this objective could not be achieved and an alternative "general counseling" approach was utilized. This change of strategies was not subsequently followed by a generation of new objectives for this alternate approach; therefore, it is virtually impossible to make statements concerning the success of this approach except on a subjective basis. The project director has indicated that the parents may now be able to accept a more structured training program. However, we should be quick to point out that any subsequent attempts at parent training should include a new set of objectives and measurement strategies.

There have been other attempts at training parents in behavior modification techniques conducted by Title VI projects, which have been highly successful. It is suggested that the project director examine some of these other approaches before attempting another parent training program.

Again, the project should be highly commended for its extremely effective procedures in achieveing the first objective. It is certainly hoped that this quality of educational program can continue and be incorporated in all programs throughout the Shangri-La School.